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TEACHERS' SALARIES

IN THE LONG VIEW, the chief source of confusion in discussions of teachers' salaries is failure to recognize the boundary line between the economic and the ethical issues involved. Policy prescriptions on what constitutes a "fair" or reasonable wage for the teaching profession cannot be formulated without understanding the economic mechanism within which the policy in question is intended to operate.

In the economic context, therefore, it deserves emphasis that each and every profession, trade, or line of work tends, in the long run, to be manned by the level of capacity corresponding to the net advantages offered by that type of activity. In a materialistic culture such as ours, the money aspect occupies a prominent role among the "net advantages"—so much so that *relative lifetime earnings* are, in fact, the primary determinants of individ-

ual choice of a profession or occupation. This assumes, of course, rational calculation, knowledge of the facts, and reasonable freedom of movement on the part of the individuals concerned.

It follows, then, that a teacher whose lifetime earnings are worth X dollars tends to be, on the average, about as capable as some other person in some other occupation with the same earning prospects. If this were not so, the free pursuit of individual self-interest would tend to make it so. Individuals capable of earning more than X would by-pass teaching in favor of more remunerative lines of work, so far as their horizon of knowledge permitted. As a consequence, the ability level of teaching would fall and that of other occupations rise until capacity and earnings were once more equivalent.

In the economic sense, the picturesque term "exploitation" as applied

to teachers' salaries has little relevance. Exploitation consists in the absence of alternatives. So long as alternative types of work are available, and known to be available, teachers will receive, on the average, about as much as other people of the same general level of ability and training.

Turning, now, to the policy or ethical issues involved, the foregoing considerations, contrary to the reader's expectation, emphasize the fundamental importance of raising the salary schedules of elementary- and secondary-school teachers and of principals and superintendents. Assuming that we consider it socially necessary to elevate, or to prevent deterioration in, the quality of the teaching profession, one necessary step in attaining that objective is to increase lifetime earnings in education. Only by so doing can we provide the economic incentives to implement our ethical objective.

Before turning in detail to the facts of the case, one additional matter of principle remains to be disposed of. Some arguments, overt or implied, for higher teachers' salaries proceed on the premise that \$3,500 a year, or \$4,500, or \$5,000, depending on circumstance, is in some sense "fair" or "just" because it allows the recipient to achieve a standard of living believed to be reasonable or necessary. Often implied in this line of thought is the belief that educators are dedicated to their profession and the community owes them a normal, petty bourgeois standard of living. The argument is

inappropriate, and the allied implication is mischievous because it destroys the economic base on which a consistent, intellectually respectable plea for higher salaries can be erected. To deal with the implication first: Given the value-patterns of our culture, it strains credulity to assert that the teaching profession is a self-dedicated priesthood. And if it were, the plea for salary increases would go largely unheeded inasmuch as there would then be little prospect either that able people who had not already "felt the call" would be attracted to the profession by higher earnings or that they would be repelled by lower earnings.

Moreover, the argument of a "fair" wage for teachers is fundamentally inappropriate because society's interest in this question lies not in what they consume but in what they produce. The reason for paying a certain wage is to purchase the corresponding level of ability and training. If the wage is not paid, the service will not be obtained. (Of course, society is also concerned with the level of consumption of individuals and families, but the most effective means for raising the consumption standards of selected low-income groups lies in direct income redistribution through taxes on the one hand and benefits on the other. The question of salary schedules for public servants can be, and should be, considered separately from the question of income subsidies to the economically disfranchised.)

If, as stated, society considers it necessary to raise the present level of

capacity in teaching, the precise point at which the lifetime-earnings figure should be set again introduces economic considerations. In all its aspects, the problem also verges into the unexplored wilderness lying between economics and psychology. The types of questions asked should be roughly as follows:

1. What is the functional relation between earnings and ability, given the social context and the present distribution of individual capacity? That is, what level of capacity will be attracted and held within education at average annual salaries (including pensions and experience bonus, and other benefits) of, respectively, \$4,000, \$5,000, \$6,000, and so on?

2. What is the functional relation between level of capacity and educational service in the broadest sense? In other words, what marginal effect is exerted on the quality of our product by raising the quality of the workers who contribute to its fabrication? (Admittedly, my terminology does violence to the spiritual penumbra surrounding these phenomena.)

3. What is the functional relation between expenditures for purposes other than teachers' salaries and the quality of educational service?

Answers to these questions should provide a rational criterion for establishing the appropriate, that is, the socially desirable, level of teachers' salaries.

Roughly the same considerations are valid for the budget of a specified school system in a given time and

place. Of course, no school superintendent actually sets or modifies salary levels or manipulates the other dimensions of his budget explicitly in terms of these functional relationships. He operates on the basis of precedent modified by current rule of thumb. Nevertheless, the arts of budget-making and of the establishment of salary schedules consist in arriving at *implicit* solutions of the quantitative functional problems raised above. And the progress of knowledge consists, in part, of transmuting arts into sciences, in which endeavor the discovery of implicit assumptions plays a key role.

SHORT-RUN CHANGES in wage and price relationships obscure the long-run tendency toward equivalence between earnings and abilities in teaching as compared with other lines of work. The most pervasive of these short-run changes are the recurrent bouts of deflation and inflation to which our economy is subject.

Employment and money wage rates in teaching, in common with those of most government workers, are generally less flexible than job security and earnings in alternative occupations. Consequently, teachers tend to gain (in relative, and sometimes in absolute, terms) during periods of deflation and to fall behind during periods of rising prices and living costs. While this fact is clear, its effect on the lifetime profile of real earnings in education is somewhat more problematical and depends on the economic environ-

ment in which the individual teacher lives and works, on the responsiveness of money earnings to cyclical price changes in particular school systems, and on a host of other factors. Moreover, while debits in one phase of the cycle may, in particular cases, be approximately balanced by credits in another, the existence of fortuitous change is itself a net loss. As Lord Keynes justly observed in *A Tract on Monetary Reform*: "The facts, that a man is a cannibal at home and eaten abroad, do not cancel out to render him innocuous and safe."

In the foreseeable future, the prospect is one of cumulative inflation due to fiscal incompetence and malfeasance on the part of the federal government. During periods of full employment, deficits resulting from an excess of expenditures over taxes, now running in the neighborhood of three to five billions, increase the purchasing media without a corresponding rise in the quantity of goods and services and thus drive up the general level of prices. Inflation, it must never be forgotten, is a method of taxation; a one per cent rise in the retail price index is approximately equivalent to a one per cent sales tax.

This method of "financing" government outlays has the unfortunate consequence of lowering relative earnings in the teaching profession and thus making other occupations somewhat more attractive in the short run. In turn, this sets in motion two essentially different types of adjustment. First and obviously, qualified persons are discouraged from undertaking the

investment of time and money required to prepare for a teaching career. Second, many teachers abandon the profession.

Teachers' freedom of movement in abandoning the profession is, however, severely limited. Their training and abilities are not immediately useful in alternative occupations, and they cannot extricate themselves save at prohibitive cost. Since, as stated before, exploitation consists in the absence of alternatives, it is analytically correct to apply that term to this situation in its short-run context. The appropriate policy, however, is not necessarily to raise salaries; it is to make a firm prior commitment to stabilize the general level of prices through fiscal means (taxes and expenditures).

As a matter of historical record, the traditional inflexibility of teachers' money wages may be disintegrating under the impact of prolonged inflation. Professor Harold F. Clark, for instance, has constructed an interesting diagram in the July, 1950, issue of the *School Executive*, which shows that, by the early part of this year, real wages of teachers (money wages divided by cost of living) had recovered from the depressed level of 1943 to about 9 per cent above the 1939 base.

FACTS AND TRENDS in the economics of teachers' salaries are capably analyzed in a study of *Employment and Compensation in Education* by the economist George J. Stigler, of Columbia University. This slim volume,

published as Occasional Paper 33 of the National Bureau of Economic Research (1819 Broadway, New York 23, New York), is destined, I think, to become a minor classic in its field.

Earnings in elementary and secondary schools and in higher education are covered. Some of the interesting analytical features of the work are the explanations of differences between salaries paid to males and females, white and nonwhite, elementary- and secondary-school teachers as a group versus college teachers as a group, and college teachers as compared with the learned professions. Concerning the male-female differential, Professor Stigler writes:

The median salary of all teachers, public and private, was \$1,458 for men and \$972 for women in 1939. The difference seems due almost exclusively to differences in type of work, grade of school, or region. Of these factors grade of school is most important: in 1940 in cities over 10,000, men were 4.4 per cent of all public school teachers in elementary schools, but 41.3 per cent of all teachers in the regular high schools. Men generally hold the supervisory positions in school systems, and this works in the same direction. There are also relatively few men teachers in the South, where salaries are relatively low: in 1940, of the 17 states in which fewer than a fifth of the teachers were men, 9 were in the South.

After allowing for these factors, the difference between salaries of men and women teachers appears to be small—probably about 5 per cent larger for the former group.

Essentially, therefore, the analytical problem involved is that of securing wages and earnings for strictly comparable types of labor resources, comparability being achieved by

standardizing one member of the pair so as to allow for all the economically relevant differences between it and the other member.

One of the most surprising of Stigler's conclusions (surprising, that is, in terms of current folklore) is that earnings of college teachers for a representative pre-war year, standardized to allow for relevant differences, are about equal to those of independent professional workers. In 1941, average "professional earnings exceeded college teachers' salaries (taking the latter to be \$2,889) by the following amounts: lawyers, \$1,905; physicians, \$2,158; and dentists, \$893." Stigler continues:

These comparisons, however, are fatally incomplete: numerous adjustments must be made to college teachers' salaries to achieve comparability with professional earnings:

The outside earnings of college teachers are about 20 to 25 per cent of their average salaries.

The vacations of college teachers exceed those in the independent professions by at least a month on the average, and amount to at least 10 per cent of the average salary if valued at the rate at which teaching is usually paid.

The college contributions to college teachers' retirement funds average about 4 per cent of their salaries.

The occupational expense of the college professor was on the average small (probably less than \$50 per year) and his investment in equipment usually small; the earnings of independent professional workers include interest on their investment. If this investment averages \$3,000, as a rough guess, at 4 per cent the interest return in earnings is \$120. For comparative purposes, about 2 per cent should be added to college teachers' salaries.

An allowance of approximately 15 per cent must be made for the relatively greater concentration of professional workers in large cities with high costs of living; about 10 per cent must be added to college salaries to compensate for the fact that the training period is shorter than that of doctors, while a 5 per cent deduction is appropriate for comparisons with law and dentistry, which require fewer years of schooling. Around 10 per cent is also required to take account of the relatively larger sums collected by progressive income taxes from professional earnings because both the time and the cross-sectional distributions of income are more unequal than those of academicians.

In sum, more than 50 per cent must be added to the salaries of college teachers in making comparisons with earnings in independent professions. With this correction, in 1941 the "net advantages" of college teaching exceeded those of dentistry, and were almost equal to those of law and medicine.

While this document is not intended to give aid and comfort to university trustees with scanty budgets and a laissez faire attitude toward faculty living standards, it does indicate that the time-honored caricature of the mendicant scholar may be much overdrawn.

INTERGOVERNMENTAL RELATIONS AND SCHOOL DISTRICTS

AN INTERESTING and provocative study of *Intergovernmental Relations in Education* has been compiled by Robert L. Morlan, of the University of Redlands, under the editorship of William Anderson and Edward W.

Weidner, of the University of Minnesota. Morlan's work, published by the University of Minnesota Press, is Number 3 of a ten-volume project on "Intergovernmental Relations in the United States (as Observed in Minnesota)," other instalments of which refer to governmental interrelations in the law courts, highways, health, welfare, social security, agriculture, fiscal relations, etc. Although limited in scope to the state of Minnesota, except for brief excursions into the activities of the federal Office of Education and several other national agencies as seen from the point of view of the hinterlands, it provides insights into the complex pattern of mutual equilibrium in the school system of a representative commonwealth.

To the present writer, by far the most interesting material is that dealing with school-district reorganization. Minnesota shares with Illinois and Missouri the dubious distinction of being one of three states with the largest number of school districts within its borders. Morlan displays acute awareness of the problems connected with securing the necessary political and social leverage to end this deplorable situation:

The point is frequently pressed that the props of many small communities are the school, the church, and the creamery, and that the removal of one tends to administer a death blow to the entire community. It is true that in some areas, notably the small villages, the school does constitute a community center, though rarely to the extent that it should; and it is extremely doubtful whether one-room rural schools ever actually fulfil that function. Though it is questionable

whether the modern trend toward the development of larger social communities can long be held off, the sociological problems posed by the resulting dislocations are not merely to be ignored. Whatever the solution, which clearly lies in the direction of the gradual development of a sense of "community belongingness" within larger areas—if indeed this has not already happened—the existence of the problem is hardly a valid reason for attempting to turn back the clock of educational progress. Likewise, although there may be grounds for contending that schooling in the larger population centers, especially where broader curriculums are offered, orients children away from the farm, it would seem reasonable to conclude that other ways of making farm life attractive should be developed instead of fostering ignorance of other matters.

By way of a footnote to the last sentence, it should be observed that the long-run problem of farming in America, as portrayed, for instance, in Theodore W. Schultz's *Agriculture in an Unstable Economy*, is low income in agriculture compared to what farmers and farm workers would have received if they had been employed in urban industry. It follows that a major curriculum problem of the rural school is that of expediting farm-urban mobility by providing training in skills which will be useful in the industrial sector of the economy. While this statement seems to deny or ignore much that is worth while and aesthetically meaningful in the agrarian environment, a mere increase of technical efficiency in farming cannot serve to bridge the gap in earnings so long as the proportion of our national income spent for farm goods is declining and so long as the rural birth rate remains high.

Apart from the political and social questions arising in connection with district reorganization, the major technical problem in this area—that of the optimum size of attendance units and administrative units—has never been clearly posed in such a way as to provide exact quantitative criteria for action. It is, of course, vaguely recognized and embodied in current rule of thumb that costs per pupil decrease as number of pupils served by, say, a given attendance unit (school building) increases; but here, as in other fields, the advantages of large-scale organization do not continue indefinitely. There exists an optimum, or minimum-cost, point beyond which costs per unit (per pupil) again commence to rise. In fact, the functional relation between size and cost is the same in education as in many other fields of organization. It follows a U-shaped pattern, with a falling and a rising phase. So far as the attendance unit is concerned—omitting, for the moment, transportation expenses—the situation resembles that laid out in Figure 1.

The S_1 curve traces the functional relation between per pupil cost (on the y axis) and the number of pupils (on the x axis) when some specified level of educational service (level S_1) is provided. That is, it shows that the expense per pupil of supplying teaching, administrative, and supply facilities of a given quality is C_2 in a school plant constructed to take care of a students and falls to C_1 when the scale of operation is enlarged from a to b . The falling phase of the curve is due to

the advantages of specialization, division of labor, and increase in efficiency of operations associated with large-scale units of control. A student body, with the corresponding school plant,

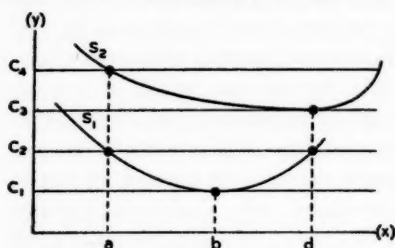


FIG. 1.—Relation of cost per pupil to number of pupils enrolled for two levels of educational service, with cost of transporting pupils omitted. C = cost per pupil. S = operating costs.

of size b represents the optimum in this instance. Beyond that point, the organization commences to become unmanageable, and administrative costs of co-ordinating and controlling the organization overbalance the benefits secured from specialization and additional division of labor. A student body of size d again incurs expenditures of C_2 per pupil. Selection of the classroom unit, with some specified ratio of pupils to teachers, would yield substantially similar results.

Suppose the level of service is enhanced by the addition of, say, manual-training facilities and school health services, so that the function is now represented by S_2 , with an optimum (minimum-cost) point at d . The expenses of conducting the enlarged program for a small clientele of size a are quite high but fall progressively as scale of operations is enlarged. One

important reason for the falling phase of the cost function in this instance is that the service facilities are indivisible; one can procure lathes and other manual-training equipment only in certain sizes, and, with more students, it becomes possible to use the equipment more efficiently.

The chief empirical problem for research in this field is that of determining the shape of the functional relationship between size and cost.

In rural districts other limitations on enlargement of the scale of operations come into play, in the form of increased expenditures for transportation per pupil in sparsely settled areas, as illustrated in Figure 2.

The S_1 curve represents operating expenditures for a given level of services. The T_1 line stands for transport costs and is governed by the density of

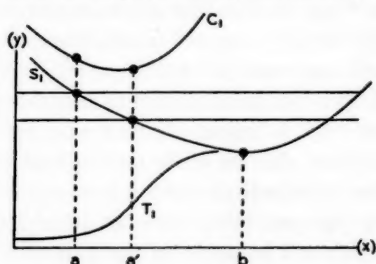


FIG. 2.—Relation of cost per pupil to number of pupils enrolled when costs of transporting pupils are included. C = cost per pupil. S = operating cost. T = transportation costs. $C_1 = S_1 + T_1$.

population, the road network of the area, and the cost of operation per mile of available bus facilities. Under these conditions, the attainable minimum lies not at b but at a' , at which

the rate of increase in transport expenses just counterbalances the rate of decrease in operating costs. (Geometrically, it is the point at which, disregarding signs, the tangent to the T_1 line equals the tangent of the S_1 curve.)

Sparsely populated rural areas with poor road facilities cannot, under these circumstances, take full advantage of the economies of consolidated operation. The practicable optimum must, of course, be determined by research in particular cases.

EDUCATIONAL OBJECTIVES

Preparing students for college life An eloquent essay "On the Problem of Transition from School to College" has been contributed by Edward T. Hall, of St. Mark's School, Southboro, Massachusetts, to the October, 1950, issue of the *New England Social Studies Bulletin*. "Transition from school to college," Hall says, "means, quite simply, the passing from a state in which goals are set for the student, into a state in which he must set his own goals." Recognition of the problems posed by this milestone in the life-history of the individual has been slow in coming:

It is somewhat glibly assumed that going from school to college is merely a matter of choosing the right college, selecting an appropriate field of concentration, and learning as many short cuts as sophomore predecessors are able to impart. The most important thing about going to college, however, is not so much "what" as "why." Higher education is not merely the postponement for four years of the necessity of making a living. It

is a vital opportunity which must be grasped by positive incentive, not by negative acceptance.

The article goes on to describe briefly the solution adopted by St. Mark's School, which set up an experimental course for Seniors designed to answer the questions, "Do you really want to go to college? If so, why?" Beginning with an exposure to the diverse points of view contained in "two provocative (and occasionally provoking) textbooks," Richard Livingstone's *Education for a World Adrift* and Sidney Hook's *Education for Modern Man*, the course concluded with a formal paper which "embodied a more or less brief statement of objectives, followed by an outline of the methods by which the student proposed to attain those objectives. Each paper concluded with a list of courses found in the college catalogue, tentatively selected to fulfil college-degree requirements, as well as the student's own educational objectives as stated in the body of his paper."

In the hothouse atmosphere of a boy's "prep" school, such an experiment might be relatively simple to design and carry through to a successful conclusion. But there is a pressing need for extending such techniques to provide guidance for occupational choice on the part of high-school students everywhere—and the alternatives should include the choice between investment in a college education and the use of the same amount of time and money to secure a start in the world of business. Education is

both a consumption good and a production good, but, so far as its latter role is concerned, society has a proprietary interest in wise, or efficient, use of individual capabilities, an interest which can be most effectively implemented through provision of knowledge as to available alternatives.

Training Other dimensions of the
our human problem of individual
resources choice and social efficiency are raised by Pro-

fessor Allison Davis, of the University of Chicago, in an article, "Education for the Conservation of Human Resources," appearing in *Progressive Education* for May, 1950. He points out that the efficiency of the social organism in the technical sense and the survival of the democratic way of life, both as an end in itself and as a means of social efficiency, require the best possible use of scarce resources embodied in human abilities. Recognition of abilities in the children of lower-income groups is handicapped because the problem-solving situations used as tests depend on the particular type of symbolic manipulations in vogue among middle-class or higher-income groups. When cultural bias was removed from so-called "intelligence" tests by substituting a generalized vocabulary in place of the specialized diction familiar mainly to middle-class families and children, class-linked differences in performance, observed on previous types of tests, substantially disappeared. Professor Davis concludes:

All our findings point to the same conclusion: The greatest need of education is for intensive research to discover the best curriculums for developing children's basic mental activities; such activities, that is, as the analysis and organization of observed experiences, the drawing of inferences, the development of inventiveness. The present curriculums are stereotyped and arbitrary selections from a narrow area of middle-class culture. Academic culture is one of the most conservative and ritualized aspects of human culture. Its formalization, its lack of functional connection with the daily problems of life, has given a bloodless, fossilized character to the classroom which all of us recognize.

This eloquent diatribe against the bourgeois mentality of American education raises echoes of Thorstein Veblen, who observed in *The Theory of the Leisure Class*:

The proximate tendency of the institution of a leisure class in shaping human character runs in the direction of spiritual survival and reversion. Its effect upon the temper of a community is of the nature of an arrested spiritual development. In the later culture especially, the institution has, on the whole, a conservative trend.

The policy problems raised by this, and similar, statements hinge on the issue of education—formal education, that is—as an engine of social change. Inevitably, education reflects, in greater or less degree, the dominant norms of its cultural environment. To some extent, education can inaugurate changes in those norms although its freedom of action in this respect is, save in a few exceptional cases, closely limited.

What Professor Davis is saying, however, if I interpret him correctly,

is that the school curriculum does not really reflect the predominant needs of the existing culture but is guided by those of an archaic past. He is arguing, implicitly, not that education should initiate *change* but merely that it should *conform* to changes already well under way. Nevertheless, this position merely poses, in a more subtle form, the question of education's ability to effect independent changes, inasmuch as the alteration in curriculum which Davis urges represents a shift in allegiance (if I may use anthropomorphic terminology) from one element of the existing culture complex to another.

Democracy and education More meaningless pronouncements have been written and spoken on the subject of "democracy and education" than on any other topic in our entire repertoire. The nature of the subject lends itself to *ad hoc* oratory and to eloquent embellishment of the obvious. In part, its inherent difficulties arise because of its familiarity; almost any literate adult can formulate some valid propositions concerning the relations between education and the democratic process. What is wanted is not mere truth but relevant generalizations around which a system of thought can be organized and from which a line of action can be taken. In this endeavor one must recognize that the culture history of a society is a continuous process of redefining, enlarging, and shifting of emphasis of value-oriented phrases

such as "democracy." In part, also, changes occurring in the functional content of institutions, such as "education," enforce changes in thinking.

A most unhelpful example of such rethinking is a little piece on "Know How vs. Know Why," contributed by Bernard Iddings Bell to the special issue of *Life* magazine on "U.S. Schools," October 16, 1950. Other features of this issue include a chamber-of-horrors article on teachers' colleges, a sprightly discussion of "The Educated Man" by Jacques Barzun, and numerous other equally informative items.

Much of Canon Bell's article is based on the all-too-common confusion between the school on the one hand and the social order on the other as causes of our cultural disabilities. Such querulous observations as "Few Americans under forty can write a simple letter and make their meaning clear. They rarely converse except in clichés," are illustrations. Further:

All the disillusioned have come to share a simple common fear: we are producing—at great expense and with the most incongruous self-congratulation—a nation of Henry Aldriches. The dismayed and the skeptical further believe that those in charge of what is called (so loosely) "education" in America have little perception themselves of what schooling is supposed to be or to do. They feel that the failures of the schools promise eventually to make our culture crude and unstable, our nation politically inept and insecure. Ours should be a "democratic education" indeed—as our rhetorical pedagogues repeatedly assert. But the critics are no longer exorcised by the glib use of that magic phrase. "Democratic education"—splendid!

—but the beauty of the adjective does not conceal the vacuity of the noun. Let whatever we have be “democratic”—but let us be sure it is also *education*.

As a matter of fact, all these strictures may be literally true, but the moot question is: How much of the responsibility for the conditions properly belongs to education *per se* and how much to social forces at work in the great society? This, in a sense, is the opposite side of the coin to the problem posed by Professor Davis. In general, because of failure to focus upon, or even to raise, this issue, Canon Bell's remarks are entertaining but innocuous preachment to refrain from sin and practice virtue.

The next phase of Bell's argument does, however, take a definite position upon a meaningful question. The following quote will suffice:

Our colleges are neither discovering nor preparing those few—be they from palaces or slums, from any social or ethnic group—who potentially are fit to serve their own people as leaders. This is no disparagement of those whose role in society may be to hew wood, draw water, and tend machines. There are no more honorable and indispensable pursuits than theirs. But for these pursuits—in the best technological schools—they should be trained. The truth today is that we are plentifully supplied with people who can make things and incredibly short of people who understand things. Technicians—to put it bluntly—are two bits a dozen in America. Thinkers—leaders of liberal wisdom—seem to have vanished with the buffalo. If the breed is not wholly to perish, our educators had better get busy.

Elsewhere Canon Bell says, “We continue to offer to the many what is

useful only to the few.” Education does indeed fulfil a multitude of functions, among which the discovery and training of leadership for a free community occupies a position of crucial importance. But the major problem in this field is that of *reconciling* the demands for training leaders with the necessity of raising the social and political literacy of all the citizens of the commonwealth. The two objectives both conflict with, and reinforce, one another in many subtle ways. Wise leaders require intelligent followers. On the other hand, the shortness of the life-span and the scarcity of resources dictate limits to the time and money which can be spared from other pressing needs of society for training the body politic in the general understandings required for participating citizenship in a democracy.

Canon Bell's robust insistence on education of the elite is misapplied, because of his failure to recognize the multiplicity of ends which must be pursued in our nation and failure to indicate the conflicts and reconciliations which are essential aspects of such a situation.

RECENT PUBLICATIONS

THE PROCEEDINGS of two summer conferences held in 1950 by the Department of Education at the University of Chicago have recently appeared. Orders for the books may be sent to the University of Chicago Press, Chicago 37, Illinois.

Leadership in American Education, edited by Alonzo G. Grace, chairman

of the Department of Education of the University of Chicago, presents papers given at the Co-operative Conference for Administrative Officers of Public and Private Schools, which was sponsored co-operatively by the University of Chicago and the School of Education of Northwestern University. Fifteen well-known educators consider all aspects of the administrator's responsibilities for leadership in a democracy. The book also presents pronouncements of six "commissions" chosen from the conference membership to study the following pressing problems: role of the federal government in education, establishment and administration of school policies, formulation of public policy, public edu-

cation and religion, universal higher education, and work education. The book sells for \$3.25.

Keeping Reading Programs Abreast of the Times, edited by William S. Gray, includes the papers presented at the Conference on Reading. Authorities consider recent changes in purposes of schooling, agencies of mass communication and learning aids other than reading, factors in community and school environments that influence reading, remedial centers, roles of group dynamics and of differentiated instruction in pupil development, supervisory techniques for improving reading, and other important topics. The cost of this book is \$2.90.

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Some of you are undoubtedly familiar with these procedures. They are not new; several large publishers have been using this method for many years. Any questions regarding this change will receive immediate attention if you will write our circulation manager, Mrs. Dorothy Waples.

WHO'S WHO FOR DECEMBER

Authors of news notes and articles The news notes in this issue have been prepared by PROCTER THOMSON, assistant professor of economics and education at the University of Chicago. RUTH FARNHAM OSBORNE, teacher of family living in the Hinsdale Township High School, Hinsdale, Illinois, and LESTER A. KIRKENDALL, associate professor of family-life education in the School of Home Economics of Oregon State College, Corvallis, Oregon, discuss the growth of family-life education in Illinois high schools and describe the inception, organization, and contents of a course in family living given in the Hinsdale Township High School. STEPHEN ROMINE, director of the Bureau of High School Counseling and Accreditation of the University of Colorado, Boulder, Colorado, suggests how to institute and carry through a program of comprehensive curriculum revision. HAROLD SAXE TUTTLE, director of leadership training at Lewis and Clark College, Portland, Oregon, points out the necessity for creating desirable motives in students and demonstrates how this can be accomplished. GEORGE GREISEN MALLINSON, professor of psychology and education at Western Michigan College of Education, Kalamazoo, Michigan, HAROLD E. STURM, instructor in science at the University of Michigan High School, and LOIS

M. MALLINSON, formerly head of the Commercial Department of the Eden High School, Eden, New York, present the results of a study of the reading difficulty of textbooks in junior high school science. O. FRITIOF ANDER, chairman of the Division of Social Studies at Augustana College, Rock Island, Illinois, discusses the problem of what a truly functional major in the social studies for future teachers should be. NORMAN BURNS, associate professor of education at the University of Chicago, and MANNING M. PATILLO, JR., instructor in the Department of Education at the University of Chicago and assistant secretary of the Commission on Colleges and Universities of the North Central Association of Colleges and Secondary Schools, present a list of selected references on higher education.

Reviewers of books CARROLL D. CHAMPLIN, professor of education at Pennsylvania State College. MAX D. ENGELHART, director of the Department of Examinations of the Chicago City Junior College. ROBERT E. KEOHANE, assistant professor of the social sciences in the College of the University of Chicago. FRANK S. ALBRIGHT, supervisor of secondary education in the public schools of Gary, Indiana. JOHN H. ANGELL, dean of Eureka College, Eureka, Illinois.

FAMILY-LIFE EDUCATION IN ILLINOIS HIGH SCHOOLS

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RAPID GROWTH

SIX YEARS AGO, not more than one or two high schools in Illinois had comprehensive, well-planned programs of education for marriage and family life. However, at the close of the 1949-50 school year at least twenty-five schools had such programs. While most of the schools are in the Chicago suburban area, not all of them are, and interest is not confined to that locality.

These are comprehensive programs in education for marriage and family life, not simply a unit on budgeting, or sex education, or child care, or dating courtesy, though any of these may be included as integral parts of the complete offering.

The movement probably owes its rapid growth to several facts. First, there has been keen awareness on the part of school people of the need for programs which would help high-school boys and girls with their problems of dating, courtship, mate selection, and family life. Second, the demonstration of successful programs in several schools has made it possible

for others to follow quickly. Third, a series of small, informal conferences involving personnel in interested schools has kept the interest constantly growing. Through these conferences, authorities from the various schools have learned about what others were doing and have become aware of the possibilities within their own schools.

Table 1 gives a quick view of some of the representative programs that are in operation in Illinois. The reports on which this tabulation is based show that, except in Chicago, the courses have met with the approval of pupils, parents, and community. The enrolments have increased regularly, and teachers have been asked to appear before parent groups to discuss topics related to their family-living courses. In Glen Ellyn (Glenbard High School), student panel groups organized from the family-living class have appeared before numerous public gatherings to emphasize the value and importance of the work. Parents there decided to begin study groups, the fathers showing particular inter-

est. Further evidence of approval is the fact that, when teachers of the courses must be replaced, the schools have specified that the new instructors must have the qualifications to take over the work.

The only adverse experience occurred in Chicago. There a home-economics teacher in one of the high schools offered a course titled "Youth and Family Life Today." One of the newspapers ran a laudatory story about this course but, unfortunately, used the headline, "Chicago High School Offers Course in Sex Instruction." This publicity brought adverse reactions from some of the special-interest groups in the city, and their pressure was enough to cause the withdrawal of the course, despite the strong approval of patrons of the school.

This action spurred city-wide interest and study by local parent-teachers' associations and by the Chicago Region Parent Teacher Association. This group recommended that family-life education be incorporated in the curriculum of the Chicago public schools. It is our understanding that these recommendations are now under consideration by the Board of Education and that a course at the secondary level is being contemplated.

Reflecting the interest throughout the state, a group of teachers from the fields of biology, home economics, health education, and guidance, under the leadership of C. O. Jackson, of the University of Illinois, have worked out a "Suggested Outline of a Unit

for Junior and Senior High School Students in the Area of Family Living and Human Relations." Published in November, 1949, this experimental material is available as a fifty-one-page mimeographed booklet from the Office of Public Instruction in Springfield.

THE HINSDALE EXPERIENCE

In 1946, Dr. C. E. Spearman, superintendent of schools in Hinsdale, discussed with [Mrs. Ruth Osborne the desirability of offering a course in family living. Mrs. Osborne, a teacher of English and Latin, is also interested in the social studies. Desire for such a course had been expressed by pupils, patrons, and faculty members. It was decided that Mrs. Osborne would offer the course, but only after she had had ample opportunity to prepare herself and after the public had been fully educated to what was being planned.

Accordingly, she devoted her available time for two years to studying books, pamphlets, and whatever syllabi she could obtain. She attended conferences and, in the summer of 1948, the University of Chicago Workshop in Family Life Education. Her efforts were devoted to building her own background, particularly with reference to the psychological, personality, and behavior patterns basic to successful marriage and family life. She paid particular attention to studies of pupil needs and to bringing together references to available films, pamphlets, and textbooks. During

TABLE 1
DESCRIPTIONS OF REPRESENTATIVE COURSES IN FAMILY LIVING STARTED IN ILLINOIS
HIGH SCHOOLS IN LAST FIVE YEARS*

School and City	Date Course Started	Separate or Integrated Course	Length	Grade and Sex	Teacher	Topics Emphasized	Miscellaneous
Barrington High School, Barrington	Spring, 1947	Integrated into social studies, health and physical education, English, home economics, science		IX-XII Boys and girls together except in physical education		Human growth and development, hygiene, marriage and family life, formation of good attitudes and sound philosophy	Joint elementary- and high-school faculty planned integration, with aid of consultant. Parent education at same time
Bloomington High School, Bloomington	September, 1949	Separate	Nine weeks	XII Boys and girls	Home-economics teacher	Personality development, dating, mental health	Course to be expanded and lengthened
Champaign High School, Champaign	1946	Separate In home-economics department	Semester	XI and XII Boys and girls	Home-economics teacher	Preparation for marriage	Because of scheduling, two classes segregated by sex. Occasional joint meetings
Chicago (one school)	1948	Separate In home-economics department	Semester	XII Boys and girls	Home-economics teacher	"Youth and Family Life Today"	School patrons approved. Unfortunately newspaper headline caused adverse public reaction and withdrawal of course
Glenbard Township High School, Glen Ellyn	September, 1948	Separate	Semester	XI and XII Boys and girls	Man, sociology major	"Family Living"	Reception good, enrollment doubled each semester
John Greer High School, Hoopeston	September, 1948	Separate	Year	XII Boys and girls	Man, principal, with social-studies background	Mate selection, preparation for marriage	Prepared for by course in Grade XI emphasizing personality development and mental hygiene
Hinsdale Township High School, Hinsdale	September, 1948	Separate	Semester	XI and XII	Woman teacher of English and Latin	Maturity, mental health, child training, marriage and family life	See this article for details
Lacon-Varna Mid-County Community Unit, Lacon	1946	Separate In home-economics department	Year	XII Boys and girls	Home-economics teacher	Dating, mate selection, family life	Reception good in this rural community
Leyden Community High School, Franklin Park	First course in spring, 1945 Regular course in fall, 1945	Separate	Five sessions	XII Boys and girls	Various	Dating, courtship, marriage	Lecture-discussions in first attempt
		Separate	Semester	XII Boys and girls	Man teacher of social studies	"Personal Problems"	Regular course plus a class meeting once weekly for overflow
J. Sterling Morton High School, Cicero	February, 1947	Separate	Semester	XII Boys and girls	Psychology teacher	"Psychology of the Family" (Dating, conduct in boy-girl relations, adjustment to current family situation)	Started with one class. In the next fall three sections were offered
New Trier Township High School, Winnetka	September, 1947	Separate In science department	Semester	XII Boys and girls	Biology, a man and a woman	Personal problems, preparation for marriage	Reception good

* One school, North Shore Country Day School, has carried on its program for more than twenty-five years.

TABLE 1—Continued

School and City	Date Course Started	Separate or Integrated Course	Length	Grade and Sex	Teacher	Topics Emphasized	Miscellaneous
North Shore Country Day School, Winnetka	1923	First integrated. Now separate		IX-XII Boys and girls separately	Man principal	IX, Sex education X, Elementary psychology and mental hygiene XI, Comparative religion and philosophy XII, How to get along in college, moral standards	Regular, one-year health-education course in Grade IX. Then, weekly discussion groups
Palatine Township High School, Palatine	1946	Integrated unit in social studies		XII Boys and girls	Man (social studies major)	Preparing for marriage and family life	Good reception led to expansion of unit to comprise three-fourths of course
Princeville Community High School, Princeville		Separate In home-economics department		XI and XII Boys and girls			
Proviso Township High School, Maywood	Fall, 1945	Separate	Year	XII Girls in 1st class. Later both sexes	Man teacher of social studies. Later two teachers part time	Dating, courtship, marriage	Started with seven groups in weekly, noncredit class. Soon increased to ten groups
Riverside-Brookfield Township High School, Riverside	February, 1949	Unit in required semester of sociology	Six weeks	XII Boys and girls	Men, social-studies teachers	Preparation for marriage	Reception good, course continuing
York Community High School, Elmhurst	1946	Incorporated into courses in health and physical education					Counselor helped students individually
	February, 1950	Separate In home-economics department	Semester	XI and XII Boys and girls		Family relations	

the same period the Hinsdale High School Parent-Teacher Association planned its programs with a view to preparing the community for understanding and acceptance of the new offering.

The course, called "Sociology of the Family," was offered for the first time in September, 1948, as a semester elective for Seniors. The first class numbered twenty-five, about equally divided between boys and girls. The second semester the enrolment was

limited to forty. The next year there were two classes each semester instead of one, and about two-thirds of the Seniors took the course. A few Juniors were admitted, some of them because they had problems.

In the first year the school had been surprised at the rather dramatic changes in a number of boys taking the course. Bill, for example, a big, noisy, rough boy, had gone through three years of high school doing as little work as possible, wasting his time and

other people's, and making as much of a nuisance of himself as he could without being put out of school. In the family-living course he seemed for the first time to find meaning in school work, to feel a connection between himself and his studies. After his first morning at the community nursery school (where each student spends two days observing and assisting), the director telephoned that Bill had a wonderful "way" with children and had accomplished something unheard-of with their chief problem child. No one had ever been able to get the little boy to concentrate on any activity for more than one minute, but Bill had him pulling nails out of a board with rapt attention for twenty minutes solid, while the staff watched in amazement. Bill's success at nursery school gave him status with his own group, and he began to change his role from that of clown to contributing member. He found himself and began growing up. His work in all areas improved, and no one lamented more than he that this had not happened to him sooner.

Because of experiences like this, counselors and teachers began to feel that this course should not be reserved for Seniors. The students also (though the Seniors at first resented having Juniors admitted) have felt the same and have always said, long before the semester was over, "*Why* haven't we had this kind of help before? We needed it sooner!" In fact, the first group enrolled in the class started quite a campaign for some changes in

the seventh-, eighth-, and ninth-grade curriculums.

Each semester the course has been built around the problems of the group. Asked to write papers, signed or unsigned, saying what they wanted to get out of the course, the first group turned in disappointingly tentative and perfunctory statements. But the second group, reassured by reports from the first, opened up with a challenging array of problems. Many wanted help in making friends, overcoming shyness, starting and carrying on conversations. Others posed such problems as how to get along better with their parents, what is the best age for marriage, how to pick the right mate and make a marriage work, what to expect of married life, how to manage the family money, whether wives should work outside the home, whether a person should marry a person of a different religion, whether one could be happy with a person who is from entirely different surroundings but has the same friends, how to stop drinking too much.

A number who came from broken or unhappy homes evinced deep fear of marriage and an almost pathetic eagerness to learn how to avoid the mistakes their parents had made. A boy whose home was breaking up around him asked three sad questions:

Why are some people, including myself, afraid of marriage? Why after so long should two people consider getting a divorce? Why should a father and his son not get along?

A girl who had grown up in a boarding home wrote:

I'm eager to learn about the family. I've never had a real one, and I'd like to know how to make a marriage work, which is one thing my parents couldn't do, thereby not being able to teach me. My largest problem is being afraid of marriage. I have said many times that I wouldn't even think of getting married, but going out on as many dates as I have has changed my mind. I can see a slight future in it now, whereas I couldn't before.

A boy who has grown up without his father said:

When I'm a father I'm going to make sure my children are not handicapped as I have been.

The classwork begins with a discussion of the question, "How will things be different for us next year?" With a list on the board of new responsibilities that will come with living away from home at college or with having a job and being self-supporting, the students quickly realize that greater maturity will be required of them than ever before.

The question posed then is, "What is a mature person?" The first few weeks are spent in working out together a thorough analysis of what it means to be mature physically, intellectually, emotionally, socially, and philosophically. At the end of this period each student writes an evaluation of his own maturity, following the outline developed by the group. An exchange of views with parents often proves enlightening to all concerned.

This opening work on maturity results in a great deal of soul-searching and growing up fast. It sets the stage for consideration of adult prob-

lems in an adult manner. Many students feel that this is the most valuable part of the course. Here are comments from some of them:

I found that my ability to accept responsibilities and to take consequences were sadly in need of improvement. I had only to look at those tremendous library fines to realize this; and what about all those times I shaded my stories so that it would look like the other person was to blame!

One of my failings is my inability to see the other person's point of view, which leads me to make hasty and unfair judgments of people. I also lack the ability to accept failure. I find myself giving up or minimizing the success of others when I am faced with competition.

Ever since I was small I have usually got a good percentage of the things I wanted, and therefore I now sometimes have trouble taking no for an answer.

Problems of mental hygiene come up again and again in the discussion of maturity: the importance of facing problems squarely, of learning to make wise decisions, of taking responsibility. A careful study of healthy ways of thinking and feeling follows.

Implicit in the analysis of maturity is the understanding that we begin in infancy and early childhood to be what we now are. The study of child development and child training follows of necessity if students are really to understand themselves and to become good parents. Beginning with heredity and prenatal influences, the class studies reproduction and goes on to stages of physical, social, and emotional development.

Since the regular teacher has a weak background in science, an inter-

ested science teacher has planned two days of work on heredity for the family-living class. The fact that he and the woman teacher are able to discuss, impersonally and without a trace of embarrassment, human biology and mating, puts the students immediately at ease. Actually, the fears that many adults have about the difficulty of discussing such matters with mixed groups of young people are based almost entirely on their own feelings. Usually, students are surprisingly free from tension and, given the vocabulary, welcome the chance to learn through discussion.

The question of sex education always comes up, if it has not before, when the class studies children. The pupils ask how to teach children about sex so that they will accept it as a normal, right part of life. In connection with discussions on this subject, the film *Human Growth*¹ is shown, and the students are asked to look at it objectively and evaluate it as a teaching device to be used with young children. Groups taking over the film always agree that they wish they might have seen it in Grade VII or VIII, or before. They say the same thing when they read Strain's book *Being Born*.² The film *Human Reproduction*³ is shown also, and, if students

ask questions which the teacher feels unqualified to answer, a doctor is invited to come in.

A list of questions, handed in anonymously if the students wish, is prepared and sent to the doctor ahead of time. These lists have included questions about pregnancy and childbirth, venereal disease, and various other topics, such as the Rh blood factor, blue babies, feeble-mindedness, and sterility. Care is taken not to refer to the doctor questions which are primarily psychological. It is most important, if a doctor is to come in at all, to find one who is thoroughly informed and up to date and who can talk to the students as man to man, giving them straight facts. He should know and like young people and be able to meet them on their own level, without talking down to them. He should understand the implications of psychosomatic medicine and the psychological aspects of many problems.

Since the students in one class seemed to feel strongly about their own lack of sex information, I suggested that it might be interesting if they would write down on unsigned papers how they got their first sex information and whether they thought it was a good way. It turned out that one of the girls, age seventeen, had thought until recently that babies were born through the mother's mouth. Another had thought that they were delivered only by incision in the abdominal wall. One of the brightest boys in school said that his parents had never told him anything until just a few weeks before, when

¹ Prepared by the E. B. Brown Trust of Portland, Oregon, and distributed by Illinois Social Hygiene League, 303 East Chicago Avenue, Chicago 11, Illinois.

² Frances Bruce Strain, *Being Born*. New York: D. Appleton-Century Co., 1936.

³ Distributed by McGraw-Hill Book Co., Inc., New York 18, New York, or Indiana University, Bloomington, Indiana.

his father had belatedly set out to explain things. Said the boy, "Gee, I hated to see the poor guy suffer, but I did want to hear what he'd say!"

Most of the students had received all their facts in elementary school from older children. Some parents had given their children good information, but too late. Other parents had dodged questions until children would not ask any more. Of thirty-seven students, five felt that their parents had done a first-rate job of sex education.

Only at one point in the course have boys and girls been separated. Each semester the boys have been invited to spend an evening in their teacher's home discussing with a man counselor any problems which they have not felt free to bring up in class. These meetings have been evaluated by the boys in glowing terms, often as the most helpful experiences of their lives. The girls have enjoyed similar sessions with the teacher at co-operative teas at her home.

Students have expressed satisfaction at meeting faculty members outside the classroom. They say that it makes teachers seem more human to see them in their homes. This response was elicited also when the classes last year visited, in a faculty housing project, homes of men teachers who had young children. During one class hour they saw two-month-old Christine bathed, heard nine-month-old Roberta's mother and father describe her recent development, and watched adopted Jimmy play while his mother discussed adoption with the students.

Papers written by students provide excellent discussion material, though the greatest care must be used to avoid identification. Accounts of "How I Have Been Disciplined" give opportunity for evaluation by students of methods in common use, and this can be a real learning experience. Statements of "What I Can't Understand about Girls [or Boys]" provoke a rousing and, to the students, most enlightening discussion.

Common problems can be taken up in class, but specific difficulties must be dealt with individually. Students are invited to talk over with the teacher anything that bothers them at any point in the course. This kind of course, because it gives young people so many new insights and so much light on interpersonal relations, must be accompanied by the opportunity for individual counseling. Some students become confused. Others who find themselves in difficult family or social situations simply need to talk with someone about how they are interpreting and applying their new learning.

It cannot be overemphasized that confidences *must* be kept. Much of the value of the course lies in the opportunity for students to write and speak freely to an adult. The teacher must staunchly resist any temptation to discuss with anyone, except with the student's permission, what he has been told in confidence. Most guidance people feel that case material cannot safely be used in teaching in the school in which it was gathered until after five years have passed.

The last part of the course has been devoted to committee work culminating in panel discussions on subjects chosen by the students. The subjects taken up in one semester were dating, courtship, engagement, wedding and honeymoon, common causes of conflict in marriage and necessary adjustments, management of money, family crises, the life of the person who does not marry, working wives, divorce, and problems of old age. Each student works on two committees, and the students themselves grade the panels as groups and as individuals.

Parts of a high-school textbook in psychology are used as basic material, but a large classroom library has been found indispensable for a course which covers so wide an area. The textbook material is used for background, and much other reading is required. Students submit written reports on all reading, but oral reports on assigned topics have proved a quick and efficient way of bringing special material to the whole group. Interest in books is stimulated by reading to students portions of reports turned in by their own or previous classes.

In addition to the doctor and to parents who come in now and then for discussions on discipline, allowances, and family privileges and responsibilities, various professional persons have served as speakers and discussion leaders. A banker talks about ways of managing the family income; two pastors, one Protestant and one

Catholic, discuss bringing up children to be religious; a Jewish law student explains his faith; a representative of the family service association tells the students what that agency offers the community in the way of help; a marriage counselor discusses sources of trouble in marriage. At one session which students consider particularly helpful, the teacher and the man counselor, both of whom are happily married, tell the groups the things that they appreciate especially about their respective mates.

Each semester there have been one or two meetings for parents of students in the classes. At these meetings an effort has been made to acquaint parents with the work of the course and its objectives and to get suggestions from them regarding points they would like to have stressed. Attendance has been good, and parents themselves have asked for further meetings. Considerable progress has been made in promoting better understanding between parents and children. A special showing of a few of the many films used in the course was requested and financed by one especially interested group.

Student panels from the family-living classes have appeared at meetings of the parent-teacher association, of teachers engaged in curriculum study and revision, the woman's club, church groups, and nursery-school parents. These meetings have been helpful in interpreting the course to parents and to the community and in transmitting student enthusiasm.

A common comment has been, "How I wish I might have had such a course when I was in high school!"

Since this course is new at Hinsdale, it has been evaluated at every turn, in order that mistakes might be avoided and in order that it might be made as helpful as possible to the students. At the end of each semester, questionnaires have been submitted to students and parents. Students have also been asked to write comments, criticisms, and suggestions at various points throughout the course, especially when a new activity was being introduced. Every class has recommended extending the course to cover a year's time in order that the material might be dealt with more fully and in order that a study of vocations and consumer economics might be added. In every class there has been active interest in a study of various religions, but no time to go into it. Some other suggestions have been that the class have a larger room and more books, more time for panels and for class discussion following them, more outside speakers, more trips (to a mental hospital and an old people's home, for example), more discussions with the teacher and the man counselor about conduct on dates, petting, and other teen-age problems.

In answer to the question, "What have you learned in this course which you feel is of the greatest value to you?" the last two classes mentioned, most often and in this order: a better attitude toward sex and more understanding of what marriage means,

how to understand other people and handle interpersonal relations in a more adult way, how to bring up children. Also mentioned often were how to select a mate, "that you have to work to make a marriage succeed," how to stop worrying over trifling matters, "that other people have the same problems I do," that there are books about marriage and family problems, that "men aren't such awful things after all." One student said, "The course has made me a more understanding person." Many felt that their relations with their parents had become closer and that they were now able to discuss their problems with their elders. Almost all thought that they had become more co-operative about doing tasks around home and more understanding of their parents' points of view and problems.

SUGGESTIONS TO OTHER SCHOOLS

The experiences of Hinsdale and the other Illinois schools offer some suggestions to schools which are interested in organizing similar courses. These suggestions might be stated as follows:

1. Each school has begun by utilizing some teacher within the faculty as the instructor. Seemingly these persons were selected for their personal attributes and their understanding of youth and then asked to get the necessary academic preparation.

2. While formally organized courses have predominated in these descriptions, no uniform approach has been followed. Each school has adapted its

procedures to fit its personnel, the state of faculty and community readiness, and its own administrative problems.

3. Reception, except in the instance noted, has been highly favorable.

4. The chief factor in getting ahead has been the willingness on the part of the school authorities to attempt to do something. Again, but for the one exception, there has been no opposition, only problems to be met and solved.

5. The predominant emphasis has

been laid on the psychological aspects and the interpersonal relations of marriage and family life. Much attention is paid to developing effective human relations and to the importance of co-operation and understanding in personal associations.

6. While attention in this article has been directed primarily to courses, the schools nevertheless recognize that family-life education has many ramifications and that contributions to effective family life are made from many sources and by various teachers.

SOME STEPS IN COMPREHENSIVE CURRICULUM REVISION

STEPHEN ROMINE
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CURRICULUM REVISION is imperative, but it should not be done impulsively. To be effective and enduring, any program of reorganization must be planned carefully and executed smoothly. Changing the curriculum means changing people—pupils, patrons, teachers, supervisors, and administrators. This task in social engineering requires patience, persistence, and a great deal of understanding and tact. It can be accomplished only on an organized and co-operative basis.

STEPS IN REVISION

The purpose of this discussion is to outline briefly some steps in a comprehensive program of curriculum revision. It is predicated on the ideas that changes which are made should be sound, should pave the way for future changes, and should produce increasing confidence in, and support of, the school. The proposed steps provide a framework within which revision may be carried on successfully. In general, they are accomplished in a certain order, and a school may begin at that point in the series which seems appropriate in view of previous steps which have been completed.

1. *A thorough study should be made of the existing curriculum, the student body, the staff, the community, and other areas and factors pertinent to the school and its present educational services and the needs to be met.*

This step should provide an understanding of the situation as it exists and of the factors pertinent to it and to any changes which may be contemplated. It affords also an opportunity for all persons concerned to become better acquainted and to work together before undertaking major changes—a climate essential to a feeling of security, which is most helpful in any stage of revision. Vital data are provided by basic studies of pupil success in school; of the holding power of the school; of educational costs and services; of the opinions of graduates and drop-outs, parents and patrons; of the school staff; and of the community.

Until information such as this is available and has been interpreted, changes which are suggested may not rest on a stable basis, and wholehearted support may be difficult to secure. To propose revision without knowing the needs to be met and the

possibilities open to the school is hardly practical. These basic studies also provide opportunity to sound out public opinion, to solicit co-operation, and to point up strategy for the future. In short, the first essential step is that of making a sound estimate of the situation (4).

2. *The school should set forth a basic philosophy of education and such other guide lines or principles as are necessary to provide a clear, concise, understandable, and usable statement of what the educational program proposes to do.*

An educational philosophy should provide an over-all purpose for the curriculum and offer premises upon which to determine specifically the goals to be sought in terms of educational objectives. In the process of determining a guiding philosophy, the faculty, the pupils, and other persons concerned have the opportunity to tackle issues and to become familiar with the interaction of forces which affect the school. Answers to a great many questions, such as the following, need to be sought, and the implications of the answers are important (6):

1. What part shall pupils play in determining the educational program?
2. How shall the curricular offerings be organized?
3. What shall the school do about individual differences?
4. What roles shall the school play?
5. What relationships shall exist among elementary schools, junior high schools, senior high schools, and colleges?

6. What shall be the relationship of administrators, pupils, teachers, and parents?

This list is by no means exhaustive. It merely illustrates important points for consideration (4).

3. *The school should determine areas of life-problems with which it is to be concerned and should formulate objectives which the educational program will seek to implement.*

The importance of clear-cut goals can hardly be overemphasized. In his excellent discussion of the improvement of instruction, Tyler (7) stresses the value of objectives. A nation-wide study conducted by the writer indicates that objectives are universally considered important. Life-problems also help to orient teachers and learners and to aid them in the selection and organization of experience for more effective learning. In exploring and solving meaningful problems, boys and girls may be assisted in attaining the objectives which have been stated in terms of abilities, attitudes, interests, understandings, and other desirable outcomes (2, 5).

Without an adequate statement of educational philosophy, life-problems, and objectives, it is impossible to evaluate satisfactorily the existing program and to make sound suggestions for improvement. While some shortcomings and inadequacies are readily apparent, others are not, and, of those which may be observed, it is not always easy to determine which are merely symptoms and which are underlying causes. Some schools have

attempted revision without adequate concern for the goals which were to be sought and with little or no attention to the problems faced by learners in living today and tomorrow. Partial or complete failure is almost certain under these circumstances.

4. *The school should evaluate its existing program in light of the basic studies made, its philosophy and objectives, and the life-problems with which it proposes to deal.*

Before too many changes are introduced, a comprehensive evaluation should be made of the existing program. Some aspects are likely to be strong, others will require minor changes, and still others may need considerable improvement. Addition to the present offerings may seem advisable, and it may be desirable to delete others. Probably there will be some objectives of which many teachers are cognizant and about which they are much concerned. Other equally important outcomes may be neglected entirely. Some life-problems will be treated adequately; others will be disregarded or neglected. Teachers may find that, in striving for an objective, they are using methods which materially reduce the chances of attaining it.

Self-evaluation and co-operative group evaluation should be made. Constructive and critical work of this type points up strengths and weaknesses, areas of overemphasis and underemphasis, and provides other cues for use in future planning.

5. *The school should carefully plan its program of revision or reorganization in advance.*

In a sense, the four previous steps constitute revision, particularly for the school that has not undertaken them before. Undoubtedly, these steps will result in some changes, which intelligent teachers will make as they learn in the process of taking the steps. However, major changes, involving a great deal of organizational revision, co-operation across departmental boundaries, or institution of new forms of curriculum, are likely to occur only after these steps have been taken. The first four steps are, in themselves, too comprehensive and too time- and energy-consuming to permit other major changes to be made while they are in process of accomplishment.

It should be unnecessary to suggest that adequate planning be carried out before a program of revision is executed. Nevertheless, the experience of the writer in working with schools reveals many cases in which sufficient planning has not been done. Undoubtedly, some programs of revision that were otherwise basically sound have not been successful because they were not devised carefully enough to provide for all the details which come to light only through careful planning.

The following list is illustrative of some of the factors which need to be considered:

1. Determining which changes have most promise of success and which seem most necessary.

2. Providing for the in-service training of teachers, which is necessary to the success of the proposed revision.
3. Providing time for planning and executing the changes.
4. Making available the materials to be used in the revision program.
5. Allocating funds to finance the revision program.
6. Determining the general order of attack.
7. Assigning duties and responsibilities to those persons who are to carry out the revision program.
8. Providing necessary consultant services.
9. Establishing necessary public relations services.
10. Determining the influence of proposed changes on other aspects of the school and its program.

Careful planning will suggest other problems. It is far better to consider these in advance, so that any commitments that are made are on a sound basis. Afterwards, it is embarrassing, and sometimes it is disastrous, to forget. Both long-range and short-range plans are essential, and both the more general and the more specific aspects require consideration. Flexibility is important, and every effort should be made to predict possible obstacles and to outline plans and alternative courses of action.

6. The school should execute its plans for revision with enthusiasm.

This step logically follows the previous one. The revision needs to be accomplished with enthusiasm and vigor, but not without tact and the application of good, common sense. Changes that are especially drastic

should be prepared for well in advance. Probably, they can be accomplished only through slow stages. It is important that, after deliberation and planning, action follow as quickly as possible. Too often, nothing of significance comes of all the talking. This gives everyone an erroneous impression and sometimes backfires to forestall future planning and action. Planning is important, but all the plans in the world may result in nothing unless intelligent action is forthcoming.

7. The school should evaluate the changes which have been made and the resulting program and should make such modifications as appear advisable.

Evaluation is important in all stages of revision. Supposedly, the changes made are for the purpose of improvement. Evaluation will provide some index or measure of this improvement. It may also indicate other changes that need to be made or point the way to factors which were missed in the original plans. Since revision is only a means to an end, and not an end in itself, evaluation is essential in determining the effectiveness of the job which is done.

AN ON-GOING AND LONG-TIME
PROCESS

When is the process of curriculum revision or reorganization finished? The answer is, "Never." It is a continuous process. Of course, at given periods, the tempo is stepped up and

more time and attention are devoted to the process. During other periods, attention may be directed to other aspects of the school, or a general rest from extra activity may be in order. Nonetheless, periodic re-evaluation is necessary, additional basic studies need to be made, and other adaptations are called for, in order to keep the curriculum in harmony with changing conditions and the job which it is supposed to do. The steps which have been outlined here may be repeated in whole or in part. Failure to follow through is certain to result in an increase in curriculum lag and a corresponding decrease in the value of educational services.

No time schedule is here proposed for any single step or for the complete cycle. The time schedule will vary a great deal, depending on the size of the school and community, previous improvement programs, the time available to the staff for revision, the qualifications and experience of personnel, the nature of the community, the proposed changes, and a number of other factors.

The steps which have been suggested refer chiefly to a comprehensive revision program. To complete the cycle probably will require a minimum of three to five years, and probably the latter figure is more nearly correct. The basic studies will most likely take a year. Following this, the development of a philosophy, the determination of areas, and the formulation of objectives will easily require at least one semester. Evaluation can

hardly be done in less than one semester. Thus, two years are required up to the point of planning. Certainly, the steps of planning, implementation, and re-evaluation will not be possible of realization in less than another year, and probably longer in many cases in which the revision program is comprehensive.

Workshops and conferences during the summer and post- and pre-session conferences are helpful in the revision program. Speed should not be sought at the expense of sustained gains. It should be remembered that the changes which are made need to lay the groundwork for future changes.

SANCTION OF THE BOARD OF EDUCATION

To promote the success of this important type of school improvement, it is advisable that official sanction be given to the project by the board of education. The whole matter should be discussed in full, including estimates of costs, time required, and so forth. Approval of, and proposals for, the revision program should be entered in writing in the minutes of the board of education. In this way, less chance occurs for the project to die prematurely through changes in administrative or other personnel or through financial starvation.

Thus, administrative leadership is essential, not only in conducting the program, but in selling the idea initially on such a basis that the project may be undertaken with the likelihood of continued support over the

period deemed necessary for a fair try-out.

RECAPITULATION

To assure success, a comprehensive curriculum revision program must be studied and executed co-operatively and on a well-organized basis. As a guide that will promote consideration of essential factors, seven steps are outlined: (1) an estimate of the situation, (2) development of educational philosophy, (3) definition of life-problems and formulation of objectives, (4) evaluation of the existing program, (5) planning revision, (6) execution of proposed changes, and (7) evaluation of changes and of the new program.

These steps are meant only as guides, or as a framework. They are not substitutes for the hard work, leadership, co-operation, imagination, vision, and vigor which must characterize the activity of those who actually carry on the revision program.

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MOTIVES CAN BE CREATED

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THE ATHLETES of Horace Mann High School won a fair, clean game; the coach praised the players for their good sportsmanship. When they lost a game and were good losers, the coach again praised them for good sportsmanship. An opposing team used foul play. The players from Horace Mann attempted no retaliation in kind; the coach again praised them for their good sportsmanship. Here was direct cultivation of an attitude—in this case, sportsmanship.

IMPORTANCE OF MOTIVATION

Motivation is as important to every child of Adam as wind is to the sailboat or gasoline to the automobile. Moreover, new motives must be constantly cultivated to meet the growing demands on the developing child in our complex human society. Yet motivation is the most neglected aspect in the whole field of education. Although the welfare of human society is dependent on the direction and compulsion of human motives, those persons most capable of contribution to well-being still give all too little attention to this important task.

To be sure, the fact of motivation is recognized, but its controls are too

superficially explained and too easily taken for granted. Sophisticated in language but unsound as to fact is the familiar logic of the school man: "Motives spring from understanding, and understanding depends on knowledge." Therefore, teach more facts about history and civics! The assumption is obvious: Knowledge *about* machinery of government and past events will somehow create a *desire* for human betterment! But all the facts belie this assumption.

From a current school of educational philosophy come the untenable assertions: "The formation of motives is intrinsic in the total process of reflective thinking," and "Reasoning is an important source of motivation." Evidence to the contrary is conclusive.

Some educators, even more lacking in insight, assume that appropriate motives are already present through some happy magic. All that is needed is broad information and sound logic to direct them. "An *informed* citizenry is the best defense for democracy"—as though many of the most insidious enemies of democracy were not the best-informed individuals in the entire population!

HOW CAN MOTIVATION BE ACHIEVED?

These assumptions leave the basic problem confused and worse than unsolved. *What can the educator do to cultivate motives for good citizenship? How can motives be created?*

Successful politicians and advertisers have thrown discerning light on basic processes. These motive-makers proceed as though motives spring up, like fire, from point to point by contact. They start with an already existing interest, then attach it to the conduct they seek. "We pledge you security and plenty," say the politicians. To the inner mind of the voter they are saying, "A vote for my candidate is a sure means of getting the security which you want so much." "Keep your popularity by using Z-Z," says the advertiser, identifying popularity, which the reader already wants, with the thing the advertiser is trying to sell.

These practical applications support the law which is now clearly emerging from the laboratory: within the nervous system, *tendencies can be directly modified without conscious memory* or logical thought. The principle applies at the higher level of attitudes as well as at the motor-reflex level. Experimental psychologists have convincingly demonstrated, by an impressive series of independent experiments, that association of satisfaction with any type of behavior increases the tendency to repeat that behavior. The descriptive term, "associative shifting," strongly suggests the anal-

ogy of heat radiating from a hot metal to an adjacent colder metal.

This process is not one of imparting information. It is not a process of logic. One need not remember past rewards or anticipate future satisfactions before he can act. The urge is direct, spontaneous, unstudied. For example, Inez did not like history. She did enjoy fiction. Her teacher encouraged her to read several historical novels. Gradually, but surely, Inez came to enjoy history. History, which had been unattractive, was associated with fiction, which was highly satisfying. "Associative shifting" took place. A new attitude was created by associating satisfaction with the conduct which the teacher desired.

When an interest is created or strengthened, whether for reading history or for sportsmanship, the result is a drive, not a syllogism; a force, not a belief. A taste, whether for flowers or symphonies or human justice, is an urge, not a judgment. The same can be said of the taste for alcohol, for wealth, for mastery. Interests are dynamic forces, not intellectual concepts.

Such an interpretation is more heretical than the positive statements reveal. In its inescapable negative implications, the theory is insurgent. Beliefs are not motives; logic is not motive; judgments are not motives. Thinking and logic are means by which motives may find realization, but they are not, in themselves, motives.

A million people crowd their way into the subways at the end of a day's

work. They know the subway trains will take them home. Is the motive their knowledge or their desire to get home? The distinction is no quibble; for the assumption of identity between knowledge and motive leads to endless confusion and error. Universities give courses in criminology, assuming that students are seeking to learn how to prevent crime. In more than one case, however, it has been discovered that students were taking the course with the deliberate purpose of committing crime with greater impunity. Knowledge in itself has no motivating element. How many people who have taken courses in history participate in civic life like fans at a ball game? How many people who have had courses in science exploit society for private gain? Knowledge is not motive. It cannot, in the nature of the case, be motive. Motive attaches to outcome; knowledge seeks effective means of attaining that outcome. Motive is like a maiden calling for someone to help her cross a stream. Knowledge is a knight who devises a craft to carry her across.

THE SCHOOL'S TASK

The school that merely imparts information and cultivates skills is preparing an excellent machine to work efficiently, but it is not creating social purpose. Knowledge about history does not create desire for human justice. Knowledge about science creates no motive for its use. Knowledge of economic laws creates no wish to use those laws for the satisfaction of human needs. The only way such mo-

tives can be created is by consistently attaching satisfaction to acceptable choices.

It follows, then, that the growing child must be given approbation for making genuinely democratic choices before he faces them in actual life, unsheltered from selfish reprisals. His social interests, actual or dramatized, must always be made satisfying if they are to grow strong and compelling. Just as swimming must give pleasure if the swimmer is permanently to enjoy the sport, so democratic choices must give satisfaction if the citizen is permanently to prefer co-operative living.

This law is not one which we may take or leave as we choose. It is the universal and inescapable law by which interests are created. Satisfaction determines motives. If the child's training is left to blind chance, then such conduct—good or bad—as happens to give him pleasure will become habitual. Only when satisfaction is deliberately associated with socially helpful conduct is there assurance of the creation of social motives.

Human conduct springs from the blending of motive with knowledge. The wind fills the sails and moves the craft; the rudder guides it. Our values and interests furnish the drives of human conduct; our intellects give direction and form to that conduct. Lacking information or the ability to think logically, we blunder in our methods. Lacking motive, we remain indifferent to the most urgent needs and obligations. Only when both are combined is education complete and effective.

THE READING DIFFICULTY OF TEXTBOOKS IN JUNIOR HIGH SCHOOL SCIENCE

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INTRODUCTION

THE READING LEVEL of textbooks has recently been discussed in a number of articles.¹ In essence, they indicate (1) that the reading levels of many textbooks are too advanced for the students for whom they are written, (2) that the failure of many students to achieve in subject-matter areas may be caused partly by the levels of reading difficulty of the textbooks in these areas, (3) that the levels of reading difficulty of textbooks within any subject-matter area differ greatly, (4) that teachers should select textbooks using the level of reading difficulty as a criterion, and (5) that publishers need to take

greater cognizance of the levels of reading difficulty of the textbooks they produce.

A number of investigations have been made of the reading levels of textbooks, particularly in the area of the sciences. The extensive study by Curtis² dealt with the vocabulary levels of textbooks in secondary-school sciences. A more recent investigation³ was concerned with textbooks in elementary science. A search of the literature, however, fails to reveal any investigation of the levels of reading difficulty of series of textbooks designed for Grades VII, VIII, and IX.

The purpose of the present investigation, therefore, is to analyze, through the use of the Flesch formula,⁴ the textbooks designed for use at

¹ a) Margaret Kerr, "Use of Readability Formulas in Selecting Textbooks," *Elementary School Journal*, XLIX (March, 1949), 411-14.

b) George Greisen Mallinson, Harold E. Sturm, and Robert E. Patton, "The Reading Difficulty of Textbooks in Elementary Science," *Elementary School Journal*, L (April, 1950), 460-63.

c) Gerald A. Yoakam, "Reading Difficulty of School Textbooks," *Elementary English Review*, XXII (December, 1945), 304-9, 333-36.

² Francis D. Curtis, *Investigations of Vocabulary in Textbooks of Science for Secondary Schools*. Boston: Ginn & Co., 1938.

³ George Greisen Mallinson, Harold E. Sturm, and Robert E. Patton, *op. cit.*

⁴ Rudolf Flesch, *The Art of Plain Talk*. New York: Harper & Bros., 1946.

the grade levels mentioned. The investigation is restricted to those textbooks written as three-book series for Grades VII, VIII, and IX and to those for Grades VII and VIII that are designed to terminate a series designed for Grades I through VIII.

METHODS EMPLOYED

A search was made to locate the titles and publishers of textbooks in science designed for use in Grades VII, VIII, and IX. This search brought to light ten series of three books each and two series of two books for Grades VII and VIII. All the textbooks that were found were included in the investigation.

It became obvious that a word-by-word analysis of the textbooks would be impractical. Therefore, the sampling technique, suggested by Flesch⁵ for use with his formula, was used with certain modifications. It was decided to select one sample for each one hundred pages, or fraction thereof, from each book, but not less than five samples from any one book.

The number of pages in each book was computed by counting from the first page designated by an Arabic numeral to the last page of textual material. Chapter endings, supplementary activities, and questions were included. Indexes, glossaries, tables of contents, and legends under the illustrations were excluded.

The number of pages in each textbook was then divided by the number of samples to be taken from the re-

spective textbook. In this way, each book was divided into sections of an equal number of pages. A page was then selected from each of the sections by use of a table of random numbers.⁶

Next, a one-hundred word sample was taken from each page that had been selected by counting from the first word of the first new paragraph on that page. If the page contained no reading material, the next page following which did contain reading material was used. These samples were then analyzed, using the Flesch formula.

The Flesch formula takes cognizance of the number of words in the sentences in the sample passages, the number of personal references (*I, you, etc.*) in the passages, and the number of affixes and suffixes (syllabification) to the words. These various aspects are measured in each one-hundred-word sample and are translated into a reading-difficulty score by means of a formula. The reading-difficulty score is converted, in turn, into a grade-level value of reading difficulty. Table 1 shows how the conversion is made.

Table 2 lists the following information for the textbooks designed for Grades VII, VIII, and IX: (1) the book publishers (designated by the letters A, B, C, etc.); (2) the average reading-difficulty score for each textbook; and (3) the grade level of difficulty for each book.

The data found in Table 2 indicate that the levels of reading difficulty of

⁵ *Ibid.*

⁶ Quinn McNemar, *Psychological Statistics*. New York: John Wiley & Sons, Inc., 1949.

TABLE 1
GRADE LEVELS OF DIFFICULTY EQUIVALENT
TO READING-DIFFICULTY SCORES*

Reading-Difficulty Scores	Description of Style	Grade Level of Difficulty
0-1.....	Very easy	Grade IV completed
1-2.....	Easy	Grade V completed
2-3.....	Fairly easy	Grade VI completed
3-4.....	Standard	Grades VII and VIII
4-5.....	Fairly difficult	Two years of high school
5-6.....	Difficult	High school and some college
6 and up	Very difficult	College completed

* Rudolf Flesch, *op. cit.*

the various textbooks vary. There is no indication, however, that the differences between the levels of reading difficulty of the easiest and the most difficult textbooks are significant. It was decided, therefore, to compute the significances of the differences between the textbooks found in the lowest group of average difficulty and those found in the highest group. Thus, the high three and the low three were used for textbooks in Grades VII and VIII, and the high two and the

TABLE 2
AVERAGE READING-DIFFICULTY SCORES OF TEXTBOOKS IN SCIENCE ISSUED BY
TWELVE PUBLISHERS FOR GRADES VII, VIII, AND IX

Grade for Which Book Intended	Average Reading Difficulty Score*	Level of Difficulty (Grade Completed)	Grade for Which Book Intended	Average Reading Difficulty Score*	Level of Difficulty (Grade Completed)
Publisher A:			Publisher G:		
Grade VII.....	2.76	VI	Grade VII.....	2.85	VI
Grade VIII.....	2.56	VI	Grade VIII.....	2.90	VI
Grade IX.....	3.60	VIII	Grade IX.....	2.78	VI
Publisher B:			Publisher H:		
Grade VII.....	3.30	VII	Grade VII.....	2.24	VI
Grade VIII.....	2.31	VI	Grade VIII.....	2.50	VI
Grade IX.....	3.54	VIII	Grade IX.....	2.41	VI
Publisher C:			Publisher I:		
Grade VII.....	2.97	VI	Grade VII.....	2.05	VI
Grade VIII.....	2.84	VI	Grade VIII.....	2.58	VI
Grade IX.....	3.52	VIII	Grade IX.....	3.04	VII
Publisher D:			Publisher J:		
Grade VII.....	2.33	VI	Grade VII.....	2.76	VI
Grade VIII.....	2.50	VI	Grade VIII.....	2.04	VI
Grade IX.....	2.86	VI	Grade IX.....	3.22	VII
Publisher E:			Publisher K:		
Grade VII.....	2.48	VI	Grade VII.....	1.91	V
Grade VIII.....	2.76	VI	Grade VIII.....	2.57	VI
Grade IX.....	3.70	VIII	Grade IX.....		
Publisher F:			Publisher L:		
Grade VII.....	3.00	VII	Grade VII.....	2.78	VI
Grade VIII.....	2.78	VI	Grade VIII.....	2.36	VI
Grade IX.....	2.75	VI	Grade IX.....		

* The average reading-difficulty scores for all textbooks for each grade are: 2.62 (equivalent to a grade level of difficulty of Grade VI completed) for Grade VII, 2.56 (equivalent to a grade level of difficulty of Grade VI completed) for Grade VIII and 3.10 (equivalent to a grade level of difficulty of Grade VII completed) for Grade IX.

low two for textbooks in Grade IX. The statistical device used for computing significances of the differences was Fisher's *t* cited by Guilford.⁷ Table 3 lists the significances of the differences computed in the manner just stated.

CONCLUSIONS

In so far as the techniques employed in this study may be valid, the following conclusions seem defensible:

1. All the textbooks for Grade VII, with the exception of three, have a grade level of difficulty equivalent to Grade VI completed. One of the three has a grade level of difficulty of Grade V completed and the other two of Grade VII completed. The average pupil would find that the textbooks were of reasonable difficulty. The students in the lower half of the class with respect to reading ability would find the textbooks rather difficult. Two of the textbooks would be fairly difficult for all but the better students.

2. The textbooks for Grade VIII are not likely to be difficult for eighth-grade students to read, except for those students in the lower level of reading ability. The data further reveal that the average level of difficulty of all the textbooks for Grade VIII is below that for Grade VII.

3. Textbooks for Grade IX have a greater range of difficulty than do those designed for Grades VII and VIII. Four of those designed for Grade

IX would be of moderate difficulty for all but the students in the higher levels of reading ability. The other textbooks are not likely to be difficult, except for students in the lower levels of reading ability.

4. Apparently, then, the textbooks for Grade VII are likely to be more difficult for the students for whom they are designed than are the text-

TABLE 3

SIGNIFICANCES OF DIFFERENCES BETWEEN TEXTBOOKS OF SCIENCE FOR GRADES VII, VIII, AND IX IN LOWEST AND HIGHEST GROUPS OF AVERAGE READING-DIFFICULTY SCORE

Grade	Mean Difference	Standard Error of Difference	<i>t</i>	Interpretation
VII..	1.02	.331	3.082	Significant at the 1% level
VIII.	.59	.243	2.429	Significant at the 5% level
IX...	1.06	.315	3.365	Significant at the 1% level

books for Grades VIII and IX for the students for whom they are designed. If, however, the popular opinion that students in the junior high school are poor readers is true, it does not seem likely that any of the textbooks which were analyzed can be considered easy reading.

5. It may be noted that the scores for the separate samples from each book, not shown here, gave no indication that the reading difficulty of the earlier samples of the textbooks is consistently lower than that of the later samples. Apparently, no provision is made for the growth of reading ability through any grade.

⁷ J. P. Guilford, *Psychometric Methods*, pp. 61-62. New York: McGraw-Hill Book Co., Inc., 1936.

6. The differences between the levels of reading difficulty between the easiest and the most difficult textbooks for Grades VII, VIII, and IX are statistically significant. It may be concluded, therefore, that the level of reading difficulty of the textbooks considered in this study may be used as a criterion for selecting the textbook.

RÉSUMÉ

The results of the present investigation may be summarized in this way.

The textbooks in science for Grades VII, VIII, and IX are likely to cause some reading difficulty for all but the better students in these grades. The relative difficulty seems to be greatest in the textbooks for Grade VII. There is no evidence that the easiest portions of the textbooks are found toward the front of the books. Furthermore, the differences between the levels of difficulty of the easiest and the most difficult textbooks are statistically significant.

A FUNCTIONAL MAJOR IN THE SOCIAL STUDIES FOR FUTURE TEACHERS

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WHAT WOULD BE A DESIRABLE major in the social studies for those persons who plan to prepare themselves for the teaching profession? Certainly, the ill-defined certification laws of our states do not provide a satisfactory yardstick. The scope of the social studies is becoming more and more inclusive. In the past, the term has been applied chiefly to history, geography, civics, economics, and sociology—the fields which center attention on human relationships.

More and more, however, we are coming to recognize that it is impossible to limit the term "social studies." Human relationships include ethics, psychology, philosophy, anthropology, art, literature, and other subjects. These subjects might well be incorporated in our understanding of the term "social studies" as they will be taught in the future.

Our expanding concept of the social studies can easily be traced from the Report of the Commission on the Social Studies of the American Historical Association; the Report of the Committee on American History in the Schools and Colleges of the American Historical Association, the Mis-

issippi Valley Historical Association, and the National Council for the Social Studies; the yearbooks of the National Council for the Social Studies; the magazines, *Social Education* and *Social Studies*; and the contributions of various individuals.

A strikingly refreshing approach to the social sciences is that of Zipf. He cuts across narrow departmental lines as he concerns himself with:

Language, vocabularies, the ego, sex, schizophrenia, theory of art, human geography, the structure and relations of cities, the incomes and social status of individuals, prestige symbols, and cultural vogues, tested against a wealth of systematic quantitative observations.¹

The approach to the social sciences at many of our sectarian or denominational schools would accept many of the ideas of the pragmatists, the naturalists, the scientific empiricists, and the liberal humanists, but they would add to these the Sermon on the Mount—the teachings of Christ. The American concept of democracy has been intimately associated with Christianity—a tradition which is pre-

¹ From a book review in *Science*, CX (December 9, 1949), 669.

served in many denominational colleges without apology.

UNREALISTIC ASSUMPTIONS

There are many weaknesses in our public school systems. In our elementary and secondary schools, the most pointed weakness, and the one most difficult to overcome, is decentralization. Therefore, a recommendation of a functional teaching major in the social studies must rest on certain unrealistic assumptions.

The first assumption would be that persons who have, for instance, been prepared to teach mathematics or the sciences would not be hired to teach the social studies. The social studies cannot be treated as facts which can be isolated from ideas and be taught by anyone who is able to read.²

The second assumption would be that school authorities would hire social-studies teachers who have adequate academic preparation to teach the social studies.

The third assumption would be that it is possible to determine what adequate academic training is and to agree upon it as the basis for the selection of our teachers.

These assumptions are significant, as, according to W. C. Bagley, the influence of our schools is more dependent on the quality and the character of the teacher than on all other factors combined.³

² Taken from a letter by Robert E. Keohane, dated December 10, 1949.

³ Quoted in Russell W. Tallman, "The Next Step in Making Teaching a Profession," *Education*, LXVIII (December, 1947), 213-16.

AN IMPORTANT STUDY

Before a functional major for the prospective teacher of the social studies is recommended, let us examine certain conclusions reached by Anderson. He gives us an excellent over-all picture of the various courses offered in the social studies and the per cent of pupils enrolled in the courses. These are the courses which could be greatly enriched by a carefully planned teacher-training program or by a functional college major in the social studies. The study by Anderson reveals the following important trends in the social studies from 1933 to 1947:

1. The per cent of pupils registered in the social studies who were taking American history increased greatly for Grades VII through XII.

2. The number of pupils registered in all social-studies courses dropped by 10 per cent in Grades VII and VIII and increased by 5 per cent in Grades IX-XII.

3. During 1946-47 nearly all pupils in Grades VII and VIII received two years of instruction in the social studies, including a one-year course in American history.

4. During 1946-47 the average pupil in Grades IX-XII took nearly three years of social studies. Most of these pupils received a year of instruction in American history.

5. There has been a substantial decrease in the enrolment on seventh- and eighth-grade levels in social studies (integrated courses, civics, and geography). American history increased.

6. On ninth- to twelfth-grade levels, there has been a great increase in American history, smaller gains in world history, civics and citizenship, geography, and modern history and a great decrease in ancient and medieval history.

7. More courses in geography on the

seventh-grade level are offered than in any other social-studies course.

8. United States history is the most common social-studies course on the eighth-grade level.

9. No courses were offered in Grades VII and VIII in government, problems of democracy, modern history, economics, sociology, ancient history, occupations, and international relations. If these subjects were taught, they were integrated in a general social-studies course or in a course in American history or geography.

10. The most common sequence in social studies for Grades VII-XII are geography for Grade VII, United States history for Grade VIII, civics and citizenship for Grade IX, world history for Grade X, United States history for Grade XI, and problems of democracy or government and economics for Grade XII.⁴

A DESIRABLE PROGRAM

What would be a desirable preparation for our future teachers of the social studies on the basis of Anderson's conclusions and on the basis of our expanding concepts of the social studies? In order to discover the opinions of experts on this question, the writer sought their recommendations and received their replies in personal letters. The following suggestions were obtained from this source.

Nickell's preference.—Vernon L. Nickell, superintendent of public instruction in Illinois, presented the problem to the supervisors of his office. These persons agreed that the minimum requirements set up by the

teachers' examining board of the state "do not provide a sufficient background." The supervisors recommended that a person who prepared himself for the teaching of the social studies should have eight hours of United States history, eight hours of world history, four hours of geography, four hours of civics, four hours of economics, four hours of sociology, and, in addition, *at least* eight hours in the subject which he will teach, for example, civics or history.

A number of educators who have long been interested in teacher training in the social studies stress the importance of a broad cultural education upon which a specialization in the social studies should be built. This specialization, they feel, should center in American, European, Oriental, and Latin-American history and the other social studies.

Browne's preference.—Richard G. Browne, of Illinois State Normal University, believes that the teacher-training program in the social studies should require *at least* forty hours in the social sciences, which would include a broad survey in world history, American history, and contemporary social problems. He states that, at Illinois State Normal University, majors must have at least twenty-four semester hours in these three areas. He recommends a degree of flexibility to permit students to specialize—in history, for instance—in order that they may be better prepared both to teach and to do graduate work. The differentiation in the preparation of

⁴Howard R. Anderson, *Teaching of United States History in Public High Schools: An Inquiry into Offerings and Registrations, 1946-47*. United States Office of Education Bulletin 1949, No. 7.

teachers for junior and senior high schools would come largely through training in education and psychology.

Browne stresses the importance of the teacher's knowing the learning processes on the level at which he teaches and the importance of special-methods courses. He is also of the opinion that the future teacher should have at least ten hours of practice teaching under competent supervision.

English's preference.—W. Francis English, of the History Department of the University of Missouri, is well satisfied with the program at his university for training teachers in the social studies. There, a teaching major in the social studies consists of seven and a half hours in American history, seven and a half hours in European history, and five hours in each of the following fields: political science, sociology, and economics, with ten additional hours in either history, political science, sociology, or economics.

Anderson's preference.—Howard R. Anderson, of the United States Office of Education, would recommend six hours of general history, six hours of world history or international relations, six hours of United States history and government, six hours of sociology and economics (a survey course), six hours of geography, and greater concentration on one of the social studies. Above all, he stresses the importance of a broad cultural background.

Wesley's preference.—Edgar B. Wesley, of the University of Minnesota,

favors a distribution of twelve to twenty hours of history and of four to seven hours in sociology, economics, political science, and geography.

Keohane's preference.—Robert E. Keohane, of the University of Chicago, makes a number of interesting suggestions toward finding an ideal teacher-training program in the social studies. His plan is far-reaching and revolutionary, and no one knows better than he that it is impractical under present conditions in American education. He deserves our most serious attention, however, if we believe that certain improvements are necessary in our system of education.

Keohane suggests that the student should have a broad cultural education during his first two years in college. In order that the school may grant recognition of good work done in high school, the pupil should be permitted to take examinations on the high-school courses in world and American history. If he passes in these courses, he should be excused from the college survey course or courses in history and be permitted to do advanced work. Should the student fail, he should take the college survey courses in world and American history without college credit.

Keohane would require courses as follows: in modern European history, three to six hours; in constitutional history or economic history of the United States, three hours; in intellectual history of the United States, three hours; in history of the Americas—other than United States history—three hours. In addition he would re-

quire three hours of historical method during the Senior year, which would include the reading of historical works by Gibson, Parkman, and other "classical" writers and the works of one or more interpretative historians, such as Charles A. Beard.

In the other fields of the social studies, Keohane would *require* an introductory course in political science; a course in the study of the community, stressing the sociological approach; an introduction to anthropology; two courses in geography, one physical and one economic and social (geology could be substituted for the former); either three hours of descriptive economics or six hours of principles of economics; and a course in international relations.

These requirements are for future teachers of the social studies in junior high schools. Keohane would require essentially the same teacher-training program for senior high school teachers on the undergraduate level, except that the program would include a Senior or graduate course of three to six hours, given jointly by a geographer, a political scientist, an economist, and a sociologist, on the methods of the social sciences. He would also require six hours in principles of economics. In addition, he would like to see all high-school teachers meet the departmental or divisional requirements for a Master's degree.

Keohane's suggestions regarding courses in education are interesting. They would include courses in introductory psychology, social psychol-

ogy, history of education, the school in the American social order, child development, contemporary education theories, practice teaching, and methods of teaching the social studies. He would strongly recommend courses in evaluation, guidance, and comparative education. He would also like to add to his teacher-training program a course in American literature and a comprehensive examination in the social studies before graduation and the granting of a teacher's certificate.

Ander's preference.—On the basis of present course offerings at Augustana College, I would recommend in a teacher-training program a course in modern European history, stressing our intellectual heritage from the Renaissance, the Reformation, the Enlightenment, and the impact of the Industrial Revolution and science on our thought and life. If time permitted, a course in medieval history, emphasizing our classical and religious heritage and the emergence of our institutions, would be valuable. A course centered especially in the impact of science upon Western thought since the days of Newton or a course in the Renaissance and the Reformation would be highly recommended. These courses would prepare the student to study with a degree of intelligence the problems of the nineteenth and twentieth centuries as reflected in history. They would show the expansion of Western thought and customs to all parts of the world.

So much for European and world history. To be able to understand America, a course in the Westward

Movement is essential. A course in the history of American immigration and one in intellectual history would follow. A survey course in American history would be given instead of the latter to students who failed to pass the comprehensive examination on the high-school level.

All the courses mentioned above offer essentially either a European or an American approach to history, but they do contain a great deal of information about other parts of the world as Western civilization advanced. The courses *are not inclusive*, however, and their shortcomings are obvious in a teacher-training program. Still, these faults would only be aggravated by a survey course which *is too inclusive* unless such a survey course could be given in the Senior year of college, when the student is in a position to draw certain conclusions which are more than sweeping generalizations.

The shortcomings of the program of study as outlined above in the field of history might be partly overcome by courses in the other social studies. These courses would include physical geography, economic geography, natural resources, international relations, government, transportation, labor problems, social problems, and a course in American literature. To these courses, we at Augustana would add courses in philosophy of religion, history of the religions of the world, and a good course in either modern philosophy, nineteenth century philosophy, or contemporary thought.

As an integral part of our teacher-

training program we would include six credit hours in physical education. A sound health program, stressing individual, as well as team, sports, would also be included.

In the fields of psychology and education, the following courses are recommended: elementary psychology, social psychology, educational psychology, American public education, history of education, philosophy of education, special methods, and practice teaching. The course in methods would be offered by a geographer, a historian, and a political scientist and would be taken by Seniors or last-semester Juniors, just before they did their practice teaching. Here, among other things, an opportunity would be given to show future teachers how a unit of study on local history might enrich and vitalize courses in history, civics, and geography.

The above teacher-training program is not unrealistic. One might conclude that no provision is made for "what it all adds up to," in the words of a teacher from a well-known teachers' college west of the Mississippi River. Still it would be impossible to say that this program would necessarily imply lack of a social philosophy. At most of our denominational colleges, we might hope that the results of our teacher-training program would not be a spiritual pessimism or one of unbounded optimism, but a social philosophy resting upon Christian teachings.

In the near future we at Augustana hope to encourage the Senior who is

majoring in social studies to take a reading course in review of the work that he has done. He would then take a comprehensive examination in the social studies. The reading course would be offered to those students who would like to graduate with honors, and it is not unreasonable to expect that most of our future teachers *should* be graduated with honors.

It is, of course, understood that every effort should be made to eliminate students who are physically unfit or those who do not possess desirable social qualities, as well as those who lack other essential qualities, such as honesty, integrity, or character, and emotional stability.⁵

FORMULATING THE PROGRAM FOR INDIVIDUAL COLLEGES

Each college must, however, prepare its own teacher-training program. The words of McConnell pertaining to a college program of general education apply as well to the problem of a teacher-training program. He writes:

Different institutions may arrive at different formulations of the nature and process of a general and liberal education. . . . each institution should make a deliberate choice of ends and means after a thorough and thoughtful consideration of basic educational problems and issues.⁶

⁵ Roscoe L. West, "The Operation of a Selective Admissions Program in a Teachers College," *Educational Record*, XXX (April, 1949), 137-47.

⁶ T. R. McConnell, "Fundamental Decisions in Developing a Program of General Education," *Educational Record*, XXIX (April, 1948), 123.

General agreement.—Nevertheless, most colleges can agree on certain main features in the teacher-training program if they are mindful of the present practices, the limitations of our system of education, and the future trends in education.

The core of the program.—Because history is still the core of the social studies in our schools and the scope of history is constantly becoming more and more embracing, any program for teacher training in the social studies must center in history. It must become the means of a better understanding of the other social sciences, as all of them share in enriching history.

Keohane's suggestion that higher institutions recognize good work done in the social studies in high school has great merit. A comprehensive examination based on high-school work in world history, American history, government, and economics should be given as soon as possible to the college student who plans to become a teacher. The results should be used to guide the student into the course which would most benefit him culturally and give him the broadest understanding of the social studies.

As we are now able to be selective in preparing our future teachers, the student should not be permitted to devote too much time to survey courses. In the field of the social studies he should by all means concentrate his attention on ideas and their importance in history.

SELECTED REFERENCES ON HIGHER EDUCATION¹

NORMAN BURNS AND MANNING M. PATTILLO, JR.
University of Chicago

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THIS LIST OF REFERENCES is a selection from material on higher education that has come to the attention of the compilers between July 1, 1949, and June 30, 1950. Institutional histories, annual reports, yearbooks, and proceedings of associations regularly devoted to the problems of colleges and universities have not been included.

The compilers have intended that their selection should be comprehensive both in the subject matter of the references and in the methods employed in the treatment of the subject matter. They have tried to select from the large amount of published material those items that they believe will be most helpful to informed practitioners in the field of higher education. It has not been possible, of course, to include all titles that might be worthy of attention.

616. *A Bibliography in General Education*. Chicago: *Journal of General Education* (University of Chicago) [n.d.]. Pp. 32.

¹ See also Item 439 (Diederich) in the list of selected references appearing in the September, 1950, number of the *School Review* and Item 504 (Diekhoff) in the October, 1950, number of the same journal.

A reprint in pamphlet form of two bibliographies on general education, one by Earl J. McGrath, which appeared in the *Educational Record* for January, 1940, pp. 96-118, and one by William Nelson Lyons in the *Journal of General Education* for October, 1949, pp. 72-80. More than six hundred items are included.

617. BLOOM, BENJAMIN S., and BRODER, LOIS J. *Problem-solving Processes of College Students: An Exploratory Investigation*. Supplementary Educational Monographs, No. 73. Chicago: University of Chicago Press, 1950. Pp. 110.
Presents the results of research into the process of problem-solving, as contrasted with the products of problem-solving. Selected students were asked to solve problems in several subject-matter fields and to do so "thinking aloud," so that a record could be kept of their thinking processes. The authors have analyzed these records in several useful ways. Special remedial instruction for students who were poor problem-solvers was offered, and the evidence collected suggests that such instruction was helpful.
618. BOGUE, JESSE PARKER. *The Community College*. New York: McGraw-Hill Book Co., Inc., 1950. Pp. xxii+390.
Presents a comprehensive treatment of the history, purposes, organization, and problems of the junior or community college. Contains a number of descriptions of developments in individual institutions.
619. BROWN, J. DOUGLAS. "The Humanities in a Divided World—A Review,"

Journal of Higher Education, XXI (April, 1950), 201-2.

This article is actually an essay on the humanistic disciplines and liberal education, although it begins as a review of Conant's recent book, *Education in a Divided World*. Draws a distinction between "liberal education" and "general education," as the two terms are currently used.

620. BROWN, KENNETH I. "Salt on a College Campus," *Journal of Higher Education*, XXI (February, 1950), 57-65.

Reviews some of the weaknesses often found in social fraternities. The author feels that these faults are not inherent in the fraternity system and that the advantages of fraternity life should be extended to a broader group of students.

621. BROWNELL, SAMUEL M. "Organization and Administration of Higher Education," *Review of Educational Research*, XIX (October, 1949), 355-64.

Reviews some of the research in the field of higher education during the preceding three years. A bibliography of 118 items is included.

622. BRUMBAUGH, A. J. "The Accrediting Agencies Face Their Common Problems," *Educational Record*, XXXI (January, 1950), 59-92.

Reports the proceedings of the conference on accreditation held by the American Council on Education in Washington on November 15-16, 1949. Includes short statements by fourteen persons who were concerned with special phases of accreditation. The general topics considered were: recent steps toward the co-ordination and improvement of accrediting procedures, the plans of the National Commission on Accrediting Procedures and of the National Committee of Regional Accrediting Agencies, and problems of accreditation demanding further investigation.

623. CAVANAUGH, JOHN J.; HUTCHINS, ROBERT M.; and WARD, F. CHAMPION. *Morals and Higher Education*. University of Chicago Round Table, No. 617.

Chicago: University of Chicago, 1950. Pp. 34.

Contains the record of a radio discussion by the authors and an essay entitled "Morals, Religion, and Higher Education," by Chancellor Hutchins. The discussants concluded that the university has a responsibility to supply the intellectual foundations of morality and religion and to maintain a "pervasive tone" that is conducive to the moral and religious development of the students.

624. CLARK, WALTER HOUSTON. "The Bible in the Colleges," *American Association of University Professors Bulletin*, XXXV (Autumn, 1949), 512-23.

Reports the results of a study of the biblical knowledge of a group of students in New England liberal arts colleges. Concludes that most students are not well enough informed about the Bible to enable them to read English literature intelligently, to appreciate many of the masterpieces of art and music, or to understand fully the democratic tradition. Considers some of the means of remedying this deficiency.

625. CRONBACH, LEE J. "Studies of the Group Rorschach in Relation to Success in The College of the University of Chicago," *Journal of Educational Psychology*, XLI (February, 1950), 65-82.

On the basis of a study of two hundred students in the College of the University of Chicago, it was found that the Group Rorschach, objectively scored, failed to predict scholastic success and gave only low correlations with criteria of social and emotional adjustment.

626. DRAKE, G. G. "The Humanities in the Technological School," *Journal of Higher Education*, XXI (May, 1950), 253-59.

Outlines a plan of instruction in the humanities, intended especially for students who have only limited time for liberal courses. The method is to confront the student with a few great works of litera-

ture, art, music, and philosophy, with the minimum of commentary required for understanding. Much of the reading is to be done by the teacher in class. This article contains a number of uncommon ideas.

627. DRESSEL, PAUL L. "Evaluation Procedures for General Education Objectives," *Educational Record*, XXXI (April, 1950), 97-122.

Restates the point of view developed by Ralph W. Tyler and other persons in the field of educational evaluation. The objective, "ability to make meaningful interpretations of various kinds of data," is used for illustrative purposes in describing the method employed in this type of evaluation.

628. EDWARDS, GEORGE W. "Integration of Humanities and Social Studies," *Journal of Higher Education*, XX (December, 1949), 457-62, 489-90.

Reports an investigation of humanities and social-studies courses in a number of institutions. One significant finding was that the earlier type of inclusive survey course is being replaced by less detailed courses organized around important problems or issues. Both textbooks and "great books" are being widely employed in these courses. The author found a tendency in many colleges to merge the humanities and the social studies.

629. FACKENTHAL, FRANK DIEHL. *The Greater Power, and Other Addresses*. New York: Columbia University Press, 1949. Pp. 88.

A collection of addresses delivered during the latter part of Dr. Fackenthal's forty years of service to Columbia University. The range of topics is wide, including matters of local interest as well as broad questions of educational policy.

630. FURNEY, LESTER C. "Co-operation in Scientific Research," *Journal of Higher Education*, XXI (February, 1950), 66-71.

Describes the arrangements between the three laboratories of the Atomic Energy

Commission and sixty-four American universities and research institutions, with special attention to the organization of the Argonne National Laboratory. Outlines some of the advantages of this kind of co-operation, both for the work of the Commission and for the research programs of the participating institutions.

631. HADLEY, S. TREVOR. "The Pros and Cons of Professional Ranking," *Educational Administration and Supervision*, XXXV (October, 1949), 354-62.

Presents the findings of a study of the opinions of faculty members in approximately one hundred colleges and universities having a system of ranks, and of seventy-nine staff members in institutions without professorial ranking. The principal reasons cited for favoring the system were its prevalence and its recognition of achievement. Emphasis on factors other than good teaching and the establishment of a caste system were most frequently mentioned as disadvantages.

632. HANCHER, VIRGIL M. "Universities in Crisis," *Association of American Colleges Bulletin*, XXXV (December, 1949), 477-86.

The crisis referred to in this article is primarily the difficulty of securing financial support for higher institutions, both publicly and privately controlled. The author discusses the role of universities in transmitting, increasing, and interpreting knowledge, and submits that these three functions are of such great importance that civilization cannot advance unless they are generously supported by the public at large.

633. HARRIS, SEYMOUR E. "Should There Be College Training for All?" *College and University Business*, VIII (May, 1950), 17.

Predicts that the economic value of college education will decrease sharply in the future, as a result of increased enrolments. "There may well be two to three applicants for each position commensurate with the training of college men and women."

Suggests greater emphasis on nonvocational education, to obviate widespread disappointment.

634. HENDEL, CHARLES W. "Democracy and Freedom—A Problem for Education," *Association of American Colleges Bulletin*, XXXV (December, 1949), 461-76.

Examines some recent proposals for the utilization of education as an instrument of social policy, with special reference to the maintenance of peace, the support of American foreign policy in the conflict with Russia, and the inculcation of loyalty. Warns that education, particularly liberal education, faces a difficult problem of preserving freedom of teaching and inquiry when its aims are closely identified with contemporary governmental needs.

635. HENDERSON, ALGO D. "The Plight of the Private Colleges, and What To Do about It," *Educational Record*, XXX (October, 1949), 407-21.

Reviews some economic and political changes that have affected the status of privately controlled colleges, concluding that financial support is the most serious difficulty facing these institutions. Suggests that this problem can be solved through tapping new sources of income and through full exploitation of the freedom enjoyed by independent colleges.

636. HENRY, DAVID D. "Notes on 'Free Enterprise' and Public Education," *School and Society*, LXX (September 3, 1949), 150-52.

Objects to the practice of identifying privately controlled colleges with capitalism and publicly controlled institutions with socialism. Holds that institutions maintained with public funds are no less interested in the preservation of capitalism than are colleges supported from private funds.

637. HOOKER, KENNETH WARD. "College Teaching: The Loneliest Profession," *American Association of University Professors Bulletin*, XXXV (Winter, 1949), 643-50.

Asserts that methods of appointing and promoting college teachers have not been altered to match the new duties of instructors offering reorganized courses of liberal or general education. The author believes that the ability to teach well does not receive the recognition it deserves from administrative officers and that outmoded personnel procedures are causing widespread neglect of classroom obligations.

638. "Instructional Salaries in 41 Selected Colleges and Universities for the Academic Year 1949-50: A Study by the Committee on the Economic Status of the Profession," *American Association of University Professors Bulletin*, XXXV (Winter, 1949), 719-47.

Presents an analysis of data submitted by institutions chosen on the basis of good salary practices. The figures show a substantial increase in salaries since the previous year, particularly at the lower ranks.

639. JUSTMAN, JOSEPH. "What Makes the Good College Teacher?" *School and Society*, LXX (December 24, 1949), 417-21.

Treats two topics: (1) the requisites of the good college teacher and (2) teaching as an art. The author seeks a balanced view that can serve as a basis for the selection and training of teachers.

640. KEEZER, DEXTER M. "The Human Element in College and University Administration," *College and University*, XXV (January, 1950), 213-32.

Discusses some problems encountered in the study of human nature as it affects the operation of higher institutions. Maintains that novels about academic life are a more fruitful source of insight into this subject than are the few analytical studies that have been made. Includes a list of such novels.

641. KLAPPER, PAUL. "The Professional Preparation of the College Teacher," *Journal of General Education*, III (July, 1949), 228-44.

Reports the results of careful observation of classroom teaching in six large institutions of higher education. Seven fairly detailed case studies of particular class periods are presented. Offers several suggestions for the improvement of college teaching, one of which is the production and distribution of films illustrating superior instruction under typical classroom conditions.

642. KLAPPER, PAUL. "Inflation in Educational Curricula," *School and Society*, LXXI (January 7, 1950), 1-9.

Examines the curriculums of several leading schools of education. Concludes that there is excessive repetition of subject matter in these schools and that superior young people are discouraged from entering the field of education because of this inflation and proliferation of courses.

643. KLAPPER, PAUL. "Problems in College Teaching," *American Association of University Professors Bulletin*, XXXVI (Spring, 1950), 53-63.

Discusses four major problems in college teaching: (1) lack of responsibility for discriminating recruitment of teachers, (2) an overweighted curriculum without intellectual design, (3) teaching practices that are not shaped by identifiable purpose, and (4) absence of constructive supervision of classroom and lecture-hall activities.

644. KNELLER, GEORGE F. "The British Adult Residential College," *Journal of Higher Education*, XXI (January, 1950), 7-10, 55-56.

Describes the residential colleges established under the Education Act of 1944.

645. KOOS, LEONARD V. "Essentials in State-wide Community College Planning," *School Review*, LVII (September, 1949), 341-52.

On the basis of extensive investigations in the junior-college field, the author presents ten generalizations that should guide state policies for community colleges. The free junior college with a broad program,

organized as a part of the public school system, is the type of institution recommended for sound community-college development.

646. KOPEL, DAVID. "Higher Education in Postwar Austria," *Educational Record*, XXXI (April, 1950), 141-56.

Describes the efforts of the thirteen Austrian colleges and universities to overcome the great losses suffered during the period 1938-45.

647. LINDSAY OF BIRKER, ALEXANDER DUNLOP LINDSAY, 1st BARON. "The Commission on German Universities," *Universities Quarterly*, IV (November, 1949), 82-88.

Elaborates the idea of a German university, formulated originally by von Humboldt in the beginning of the nineteenth century, and describes some of the unfortunate consequences of this idea in practice. The author states: "I may perhaps sum this up by saying that if I had to choose between the American university system with its great variety and its frequent lapses from any standard, and the German with its exclusive occupation with a high standard in research, I should choose the former."

648. MCINTOSH, MILLICENT CAREY. "Women's Colleges and Our Changing Moral Standards," *College and University*, XXV (January, 1950), 289-91.

Emphasizes the special stake that women have in the proper conduct of human relations. Infers from this that women's colleges should provide for rigorous study of the arts, family life, ethics, and religion.

649. "The Mission of a University—A Discussion," *Universities Quarterly*, IV (November, 1949), 15-81.

Consists of articles by eight authors, who give their reactions to various phases of Sir Walter Moberly's *The Crisis in the University*. The contributors, broadly representative of British higher education, deal with fundamental matters of more than local or temporary significance.

- ✓650. *The New Curriculum: A Review and an Assessment*. Official Publication Colleges of the Seneca, Vol. XLVIII, No. 3. Geneva, New York: Hobart and William Smith Colleges, 1950. Pp. 82.
Traces development of the American college curriculum during the past century, from the classical course, through the period of the elective system, to the integrative efforts of recent years.
651. RABE, W. F. "The Control by Business Managers in Higher Education," *College and University*, XXV (April, 1950), 409-23.
Analyzes the functions of the business manager and shows how these functions enable him to exert influence on educational policy, unless definite steps are taken to prevent this. Contrasts the role of the present-day American business manager with that of similar officers in European and early American institutions.
652. REEVES, FLOYD W. "Barriers to Higher Education," *Phi Delta Kappan*, XXXI (January, 1950), 214-24.
Summarizes findings of the following major studies of equality and discrimination in higher education: the reports of the President's Commission on Higher Education, of the New York State Commission on the Need for a State University, of the Connecticut Inter-racial Commission, and of the Committee on Discrimination in College Admissions of the American Council on Education.
653. ROCKWELL, LEO L. "Modern Languages in General Education," *School and Society*, LXXI (May 20, 1950), 305-8.
Examines the arguments for and against a wider study of modern languages. Concludes that world conditions, especially America's role in international affairs, require that more Americans know languages other than English and that our public leaders have expert knowledge of foreign languages. Holds that foreign-language study should not be limited to those few students whose parents can afford to send them to expensive schools or to private tutors.
654. RUSSELL, JOHN DALE. "Some Reflections concerning University Administration," *American Association of University Professors Bulletin*, XXXV (Autumn, 1949), 476-89.
Believes institutional integrity, the separability of policy-making and executive action, line and staff relationships in administration, equation between the authority and the responsibility assigned any person, and competence to be characteristics or principles of good administration. Considers types of leadership observed in higher education and the trend toward more democratic administration. Advises that every institution give periodic attention to its administrative structure and functions.
655. SADLEIR, MICHAEL. *Michael Ernest Sadler (Sir Michael Sadler K.C.S.I.) 1861-1943*. London: Constable & Co. Ltd., 1949. Pp. xii+424.
Recounts the life of the celebrated British educationalist, giving considerable attention to his administrative career at Oxford and elsewhere.
656. SMITH, ALPHEUS W. "In-service Graduate Training," *Journal of Higher Education*, XX (December, 1949), 463-68.
Describes some of the graduate programs maintained by government and industrial research laboratories in co-operation with colleges and universities. The primary purpose of these programs is to increase the competence of laboratory staff members.
657. STEWART, NATHANIEL. "Training the College Librarian for a Career in Higher Education," *Educational Record*, XXXI (April, 1950), 123-28.
Proposes that schools of librarianship place greater emphasis on knowledge of higher education in courses for the training of college and university librarians.

Maintains that courses for college librarians have been too narrow, ignoring the general role of the librarian as an educational officer. Outlines a course which would give this broader training.

658. STODDARD, GEORGE D. *On the Education of Women*. The Kappa Delta Pi Lecture Series. New York: Macmillan Co., 1950. Pp. x+102.

Suggests a new college curriculum for women, in which more attention would be given to "home education" than is now the case. "Home education," as the term is used here, includes instruction in health and hygiene, child development, and the application of general education to home and community life. The author rejects the idea that education for men and for women should be the same.

659. TAYLOR, WARREN. "Integration in the Humanities," *Journal of Higher Education*, XXI (February, 1950), 84-86, 111-12.

Gives an account of the ill effects of overspecialization on liberal education, especially in the constructive study of values. Outlines a program undertaken at Oberlin College, emphasizing the individual's evaluations of his experiences as exemplified in such disciplines as the fine arts, literature, music, religion, and philosophy.

660. TENNEY, EDWARD A. "Thinking-by-Commission," *Journal of General Education*, IV (January, 1950), 136-40.

Discusses the difficulties inherent in the group method of studying and judging and shows how these difficulties affected the report of the President's Commission on Higher Education. Examines, from this point of view, several of the statements in the report.

661. THOMPSON, ALAN REYNOLDS. "The Professor and the Governing Board," *American Association of University Professors Bulletin*, XXXV (Winter, 1949), 678-87.

Urges that steps be taken to secure legal representation of the faculty on the board

of control of every college and university in the country. Contrasts the European and American systems of university government. Holds that recent experience at the University of California shows that even a faculty with a strong tradition of independence is not assured of continued freedom unless it has legal representation on the board.

662. THOMSON, DAVID. "Britain's Changing Universities," *Journal of Higher Education*, XX (November, 1949), 407-9, 443.

Reports that British enrolments have increased by two-thirds since World War II, that two-thirds of the students are aided from public funds, and that the State is now providing two-thirds of the universities' income. Discusses some of the most urgent problems confronting British universities.

663. TRAVERS, ROBERT M. W. "Appraisal of the Teaching of the College Faculty," *Journal of Higher Education*, XXI (January, 1950), 41-42, 56.

Reviews evidence concerning the validity and usefulness of tests and observation as methods of judging a teacher's ability. Concludes that the former are not helpful to administrative officers in comparing individual instructors and that the latter method is invalid.

664. TRUEBLOOD, D. ELTON. "The Idea of a College," *Association of American Colleges Bulletin*, XXXVI (March, 1950), 29-36.

Pictures the college as a society of learners and teachers, in which the whole of life shall be the concern, and enumerates some of the present obstacles to the accomplishment of this ideal. Believes that closer relations among students and faculty members, together with the adoption of a system of outside examiners, would help to improve college education.

665. TRUSCOT, BRUCE. "Expansion and Modernization of Britain's Newer Universities," *Education*, LXX (February, 1950), 366-68.

A well-known pseudonymous observer of the British university scene reports recent developments in the "Red Brick" institutions. Contends that 1945 marked the beginning of an era in which the younger universities, such as Manchester and Liverpool, will enjoy great development in new directions. Cites the plan to make Nottingham wholly residential as an indication of this trend.

666. "University Administration: An Investigation by the Universities Quarterly," *Universities Quarterly*, III (August, 1949), 796-810, 812.

Outlines the postwar organization of British universities, with special attention to the provincial institutions, which differ in many respects from Oxford, Cambridge, and London.

667. "The Use of Lectures," *Universities Quarterly*, IV (May, 1950), 237-65.

Consists of separate essays by five authors, all on the general subject of the lecture as a method of teaching. The conclusion seems to be that lectures have a proper place in university instruction but that they should be more skilfully given than is now commonly the case, and that they should be supplemented by discussions and tutorials when the size of the faculty will permit.

668. VALENTINE, P. F. (editor). *The American College*. New York: Philosophical Library, Inc., 1949. Pp. xvi+576.

A general work on higher education, written by sixteen persons, each of whom contributed one or two chapters. Each chapter is followed by a fairly comprehensive bibliography.

669. *What Are the Responsibilities of a Free College in the Present Day?* Addresses, Proceedings of Meetings during 1949-1950. Spring Meeting, Saturday, April 1, 1950. Claremont, California: Western College Association (C. T. Fitts, secretary, % Pomona College) [n.d.]. Pp. 56.

Contains addresses on academic freedom and responsibility by Monroe E. Deutsch,

Ralph H. Lutz, Alice John Vandermeulen, and W. H. Cowley.

670. WHITE, LYNN, JR. *Educating Our Daughters: A Challenge to the Colleges*. New York: Harper & Bros., 1950. Pp. x+166.

Considers higher education for women, including such matters as feminism, sex differences, home life, religion, and the selection of a college.

671. WILLIAMS, ROBERT L. "A Single Board of Control for State-supported Higher Education?" *School and Society*, LXXI (January 14, 1950), 17-21.

Traces the movement toward centralized control of state institutions of higher education. The author enumerates some of the advantages claimed for centralized control and undertakes to refute them.

672. WOODBURN, LLOYD S. *Faculty Personnel Policies in Higher Education*. New York: Harper & Bros., 1950. Pp. xii+202.

Reports results of a study of the faculty personnel policies of fourteen privately controlled universities, seventeen state universities, and fifteen liberal arts colleges, selected on the basis of academic standing and geographical distribution. Deals with appointments, promotions, salaries, opportunities in teaching and research, term of appointment and separation from the staff, tenure and retirement, leaves of absence and conditions of work, staff planning, organization for staff problems, and essential conditions for development and maintenance of an able faculty.

673. YOUNG, BURNS B. "What Is a College?" *Educational Record*, XXX (October, 1949), 385-406.

Reviews the history of the word "college," showing variations of meaning in different historical periods. Discusses the Roman college, the medieval college (French, German, and English), and the modern college. Notes that the model for the American college came from Scotland as well as from England.

674. ZETLER, ROBERT L., and CROUCH, W. GEORGE. "The Graduate School in General Education," *Journal of Higher Education*, XXI (May, 1950), 239-42.

Sketches the plight of the new Doctor of Philosophy who is called upon to teach courses of the general-education type in an undergraduate college. Suggests, as a solu-

tion to the problem of the proper preparation of college teachers, that persons carefully selected for teaching careers be given a program which would include not only the usual major but also a substantial number of courses in several related fields. The authors would eliminate the doctoral dissertation as having little value for the prospective college teacher.

EDUCATIONAL WRITINGS

REVIEWS AND BOOK NOTES



ROBERT E. MASON, *Moral Values and Secular Education*. New York: Columbia University Press, 1950. Pp. viii+156. \$2.75.

Moral training is invariably associated with religion and the Christian church, so far as the Western world is concerned. Representative professional libraries, however, will reveal a relatively large number of publications demonstrating ways and means of cultivating character qualities through the proper use of orthodox public school subject matter. A worthy contribution to this field of educational literature is Mason's *Moral Values and Secular Education*, which places emphasis on the philosophical approach.

Teachers who have too little time to read elaborate and dialectic treatments of this important problem may become the beneficiaries of Mason's studious and painstaking pursuit of the truth as found in the writings of some of our most notable and profound ethical thinkers. We are reminded of the method employed by Henry Churchill King in his *Rational Living* (Macmillan Co., 1905), a book that has the same general objective as the volume now being appraised. Mason has selected carefully the quotations which he has used and has interpreted them with insight and pedagogical skill. The effect is almost as if one were reading two books—the author's textual material and the inspired writing of men at their intellectual best.

Mason's three major purposes are, first, to get historical perspective on our national conception of educational values; second, to sense the current stress which is being placed on contrasting systems of educational

values; and third, to advocate a secular, nonauthoritarian viewpoint arising from evolutionary naturalism. The second chapter provides historical data of considerable significance for those persons who desire a clear picture of the gradual emergence of institutionalized secular instruction. Both distinguished documents and outstanding pioneers are quoted to indicate the parallel expansion of democracy and secular instruction. An interesting comparison is made between the theories of John Dewey and Thomas Jefferson. An analysis of this kind should always be accompanied by close observation of the relation of pure doctrine to the adoption of principles in everyday practice. It is historically clear that parochial educational institutions have survived and have maintained high prestige, despite the proved movement away from sectarianism in the direction of secularism.

The central body of this stimulating volume is devoted to meanings and values found in essentialism, traditionalism, and individualism. The author's scholarship and conscience are displayed in these areas of discussion. His composition is dispassionate and sympathetic, with evil intent toward none and broad educational outlook for all. Still, in chapters vi and vii, the heat is applied in favor of evolutionary naturalism as the most favorable and productive agency for undergirding an adequate philosophy of modern educational practice.

The final chapter is a genuine climax, in that loyalty and faith are expounded in no uncertain terms. This chapter is much more than an epilogue. It introduces the dramatic

setting of the contemporary scene, with an authoritarian revival conspicuously revealed at definite points across the country. In Mason's own words the big question is: "Can evolutionary naturalism and the secular, free public school which it advocates withstand the growing pressure of those who insist that religion in some form be brought into the schools?" (p. 118). The author offers an excellent case for religious instruction, indicating an exceptionally fair-minded attitude toward the problem that we have all been facing through the years.

Mason also states: "As education is a mastery of techniques for control and prediction of future events, so it must be recognized that the ability so to control carries with it tremendous responsibility" (p. 120). This is a high note on which to close. This is positively the gist of the whole matter. Here is where we started, and here we shall have to stop. But contact with this helpful survey of the serious issues involved in our effort to emphasize moral values in the various types of schools that have been established throughout the land will make us all just a little more earnest to perform our professional functions and community services.

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BENJAMIN S. BLOOM and LOIS J. BRODER, *Problem-solving Processes of College Students: An Exploratory Investigation*. Supplementary Educational Monographs, No. 73. Chicago: University of Chicago Press, 1950. Pp. 110. \$2.75.

Research on individual differences through the use of tests has been restricted largely to analysis of data pertaining to the products of thought, for example, the speed and accuracy of pupils in solving test exercises. Sometimes the data include observations of overt behavior, and, from either or

both types of data, inferences have been drawn concerning the mental processes involved.

In their new book, *Problem-solving Processes of College Students: An Exploratory Investigation*, Bloom and Broder offer convincing arguments with respect to the limitations of data of these kinds and the inferences drawn from them. There is far more variation in the thought-processes leading to responses than in the responses themselves. The authors also describe the difficulties of attempting to discover the nature of mental processes through use of retrospection, introspection, or the construction of test situations in which each of a variety of methods of attack would be reflected by a different solution.

In this investigation, Bloom and Broder asked students to "think aloud" while they were solving objective exercises selected from examinations given to students in the College of the University of Chicago. The exercises that were chosen were thought-problems requiring a minimum of specific information. The students were given training in thinking aloud while solving this type of problem before data were collected by the interviewer. In collecting data, notes were taken as completely as possible on everything the student said and did. In some cases these notes were supplemented by asking the student to recall what he had done.

In chapter ii, the authors present evidence pertaining to variations in problem-solving characteristics. Particularly striking are the differences in thought-processes of individuals classified as "successful" or "unsuccessful" students according to their aptitude scores and marks on comprehensive examinations.

The successful problem-solvers showed greater ability to understand the nature of the problem and to attack the problem in its own terms. The unsuccessful problem-solvers showed lack of comprehension of directions and often presented solutions of a

problem other than the one they were expected to solve. The successful problem-solvers differed from the unsuccessful students in their understanding of the ideas contained in a problem and of the implications of the ideas; they differed in their possession of relevant information and in their ability to apply it; they were active, rather than passive, in their thinking and revealed greater care and system.

On the other hand, the authors state:

The nonsuccessful problem-solvers . . . started the problem with no apparent plan for solution. . . . They jumped from one part of the problem to another, giving insufficient consideration to any one part to enable them to find a beginning point of attack. . . . They were easily sidetracked by external considerations . . . and their thoughts would go off on a tangent, coming back to the problem only with considerable difficulty [p. 30].

The successful problem-solvers exhibited greater willingness and ability to reason and to bring a chain of reasoning to a conclusion. They possessed greater confidence in their problem-solving abilities and used greater objectivity in solving problems. The unsuccessful problem-solvers were more dependent on the possession of all the necessary information for an immediate solution. The unsuccessful problem-solvers were influenced to a much greater extent by personal opinions and value-patterns.

Chapter iii presents analyses of data in terms of the specific types of difficulties presented by different types of problems. Certain kinds of difficulties are traced to the format of the problem, the methods of recording solutions, the use of directions calling for answers having negative characteristics, and the use of relative terms. For example, ambiguous directions with respect to the recording of answers may cause students who have correct answers in mind to record them incorrectly. The request to select the worst answer or the one incorrect answer requires the student to readjust his mental set.

The use of relative terms, such as "generally," "best," "most likely," may cause the student to attempt to answer in terms of what he thinks the examiner had in mind, though the use of these words may be essential in the formulation of many problems.

A considerable part of this chapter is devoted to the kinds of translation and reduction done by students in solving problems. It was found that the successful problem-solvers were more efficient than the unsuccessful in translating and reducing or simplifying problems. It is suggested that information pertaining to the kinds of translation and reduction done by students should be of great help to test-constructors in formulating problems and that such information can best be obtained by employing the kind of technique used in this study. The chapter concludes with presentation of evidence on how the form and difficulty of a problem influences the student's method of attack.

In chapter iv, the authors report experimentation with programs of remediation in problem-solving for students of relatively high academic aptitude but of low achievement as measured by comprehensive examinations. Important aspects of the remediation programs included efforts to acquaint the students with the value of developing desirable methods of problem-solving; training in thinking aloud while solving problems, so that the student's methods can be ascertained; identification by the student of differences between his methods and the methods of successful problem-solvers; and practice in solving problems for the purpose of acquiring the methods used by the successful problem-solvers.

The first remediation program was given largely on an individual basis; in later programs, group techniques were developed. Evidence from reports of differences observed by the students themselves, from instructors about changed classroom behavior, from changes in problem-solving reports while thinking aloud, and from changes in

examination performance supports the conclusion that remediation in problem-solving can help students.

The authors are suitably cautious in generalizing from differences statistically significant at the 1 per cent and 2 per cent levels in only two of seven comparisons. In the opinion of this reviewer, such caution, while commendable, should not be given much weight. It is at least logical to presume that remediation programs including larger numbers of students and continuing over longer periods of time would be certain to result in statistically significant differences.

The importance of this study can hardly be exaggerated. The evidence with respect to variations in mental processes of students who are engaged in problem-solving should make a definite contribution to the defining of curriculum objectives. The same evidence should be of great value to constructors of objective examinations. The evidence with respect to variations in mental processes and the information with respect to remediation in problem-solving should contribute to the improvement of instruction. Many more studies of this kind should be made because research of this nature is fundamental to the understanding, control, and measurement of individual differences. The authors refer to their study as an "exploratory" investigation. Possibly, the adjective used by other educators in the future will be "classic."

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EDGAR BRUCE WESLEY, *Teaching Social Studies in High Schools*. Boston: D. C. Heath & Co., 1950 (third edition). Pp. xiv+594. \$4.00.

Teaching Social Studies in High Schools, by Edgar Bruce Wesley, is probably the best mirror in which many of the most effective social-studies teachers in the United States

may view themselves professionally; for this work, although in large part new and directed solely to the high school, is the outgrowth of earlier editions (1937, 1942), which were addressed to a wider audience and which have influenced prevailing practice. Furthermore, Wesley's influence has also been exerted directly through his teaching of many teachers and indirectly through his long-continued leadership of the National Council for the Social Studies.

The present edition of the book is much better organized than either of the earlier editions and has gained in both simplicity and clarity. The new materials are particularly noticeable in the first section on "Society and the Social Studies," in the chapter on curriculum trends, and in the two new chapters, "The Social Development of Adolescents" and "Developing Concepts and Generalizations." The history of the social studies in the United States since 1892 has been largely integrated into the section on making the curriculum. The sections "Resources and Equipment," "Methods of Teaching the Social Studies," and "Appraising the Results" show less change, though in some chapters, as in the chapter on discussion methods, a rewriting of the introductory paragraphs puts the old material in a new, and, it seems to the reviewer, a much superior, setting.

Perhaps the greatest strength of Wesley's work is its practicality. Almost every chapter has some idea or device which the busy teacher will find immediately useful. To be sure, such an approach sometimes necessitates belaboring the obvious—or what should be obvious—but all teachers will not find that a defect. Time after time, the steps in a process are explained and illustrated, or items to be checked, as in the evaluation of a textbook, are conveniently listed. The experienced teacher may skip the illustrations of, and comments on, some of the more common objective-test forms, for example, but the novice will find them invaluable.

Closely related is the good integration of educational principles with a "common-sense" attitude toward their application. The value of having unattainable educational objectives is set forth simultaneously with the explanation that they are unattainable and with examples of more definite standards related to these objectives that may be achieved. Similar is the treatment of the vexatious question of the treatment of controversial issues in social-studies teaching. "The answer to the question, 'Should teachers deal with controversial issues?' is that they should, after performing their routine obligations, deal with nothing else" (p. 16).

As Wesley is a pioneer among social-studies leaders in recognizing the significance of relevant professional history for understanding what we are about today, it is not surprising that his treatment of social-studies teaching in the American past is, for the most part, adequate in coverage, lucid in exposition, and so organized as to throw a clear light on some of our present problems. Yet even his treatment would benefit from some consideration of the pre-1892 background and, in particular, from an integration into the present work of material on the social sciences, which "progressed" from the second chapter of his first edition to an appendix in his second and disappeared in the present work. The chapter "Methods of Utilizing Sources" suffers from the usual failure to analyze adequately the several operations which are subsumed under that heading and from reliance on a misleading account of the historical development of the so-called "source method."

Just as Wesley's work reflects some of the strong features of our better social-studies teaching, so it mirrors our weaknesses. Perhaps the most apparent of these lacks is the disregard of non-American experience, past and present, in the teaching of the social studies. Readers who want a brief account of non-American history-teaching will still find the 1940 revision of Henry Johnson's

classic of 1915, *Teaching of History in Elementary and Secondary Schools* (Macmillan Co.) most helpful. For accounts of contemporary comparable work he will have to dig in the sources. But, until some of our educational bodies that are concerned with social education are sufficiently convinced of the need for the comparative approach to that field to devote a yearbook to the subject, it is unfair to criticize the synthesizer for not synthesizing what has yet to be done.

The annotated bibliographies which Wesley places at the end of each chapter furnish the most convenient single guide to recent significant American writings on the social studies that is to be found.

American social-studies teachers are fortunate in having available several able treatments of their professional problems and opportunities. Wise teachers will add the new Wesley book to the shelf on which are found Ernest Horn's *Methods of Instruction in the Social Studies* (Charles Scribner's Sons, 1937), telling how to combat verbalisms; Henry Johnson's volume explaining how to teach elementary-school children the elements of the historical method; and Quillen and Hanna's *Education for Social Competence* (Scott, Foresman & Co., 1948), showing how to develop teaching units, to study the community, to use persuasion materials, and to use the "problems" approach profitably.

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PAUL R. MORT and WILLIAM S. VINCENT, *Modern Educational Practice: A Handbook for Teachers*. New York: McGraw-Hill Book Co., Inc., 1950. Pp. viii+438. \$4.50.

In their new volume, *Modern Educational Practice: A Handbook for Teachers*, Mort and Vincent have tried to avoid the common criticism that books on educational theory

are too far removed from school practice. They have attempted, in this volume, to begin with educational practice and then to match theory with practice.

The basic material for the book is unique; for its authors have access to thousands of anecdotes or descriptions of teaching devices and practices which have actually been carried on in classrooms. The authors have unusually rich sources of this material through having been connected with five extensive studies of what they call "educational know-how." One of these sources is a recent cost study of a hundred New York State school systems. Another is the information collected in the New York City area by the Metropolitan School Study Council. A third source is the continuous reporting of school practices in this council's periodical, *The Exchange*. Other sources are a nation-wide sampling of elementary schools by the Educational Policies Commission and a study of practices in Pennsylvania. The authors have selected the best examples from the thousands of descriptions of school practice provided by these studies and have organized them into a handbook which teachers can immediately relate to their own teaching.

The way in which this "hodgepodge of practices" has been organized into book form is interesting. A brief chapter on why and how the book was written is followed by a chapter on the objectives which good schools are trying to accomplish. Briefly, these objectives are: (1) better teaching of the basic skills and basic fields of knowledge, (2) discovering and developing the many special talents in individual pupils, (3) guiding pupils in learning to think, (4) developing desirable character and personality in pupils, (5) developing good citizenship, (6) developing attitudes and habits of good health and safety, (7) using the full resources of community and staff in planning the program of public education. Following this outline are twenty-one chapters, each of which deals with examples of a type of practice that will help to accomplish the objectives.

Each chapter begins with a brief introduction written in a down-to-earth style, which sets the stage and communicates the importance of the given type of practice. Then follow anywhere from fifteen to fifty-four descriptions of the practices which teachers have actually carried out and found successful.

These practices are graded roughly according to maturity level, and descriptions which are useful to teachers at all levels of teaching—primary, elementary, and secondary—appear. Inserted in each chapter is a page in semidiagrammatic form of what the important principles of psychology and the demands of society say about this particular type of practice.

Thus, the volume is a sort of recipe book for teaching. This expression is not necessarily one of disapproval, because recipe books are wonderful collections of dishes that other people have found good. The ordinary cookbook, however, assumes that the reader knows how to prepare and serve a meal, and the user of a recipe book still has to decide how each recipe will fit into his total plan.

Altogether the volume contains about 690 samples of "educational know-how," arranged under 21 headings and correlated rather carefully with psychological and sociological theory. Even the authors disparage their work slightly by mentioning a mail-order catalogue in discussing how a teacher may use their book. They say that a teacher can decide what he wants to do and then look up ways of doing it; or he can just leaf through the book and read about interesting practices; or he can identify his most critical problems and then try to find anecdotes in the book which describe solutions to these problems. The authors also suggest that principals and supervisors use the book for ideas on how to improve their schools.

It is most stimulating to find an entire book devoted to actual practices which have been reported or observed in classrooms. Careful reading of some of the better descriptions will take one's imagination into a

classroom where the teacher and pupils are having an adventure together. As a whole, the book will be of continuing value to the imaginative teacher who is willing to study the basic psychological and sociological principles involved, run through the examples of practice described, and then energetically apply the same process of thinking and doing to his own class.

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EDWIN R. GUTHRIE and FRANCIS F. POWERS,
Educational Psychology. New York: Ronald Press Co., 1950. Pp. vi+530. \$4.00.

One problem which seems always to be present for a teacher of educational psychology is to find a textbook which maintains the correct balance between general psychology and educational psychology. Probably this same quandary is present for authors in this area. In fact, that may be one reason why so many books have appeared in this subject, frequently with the simple title of "Educational Psychology." Most textbooks in this field seem either to include too much duplication and restatement of the principles of general psychology or to have such scant foundation on basic principles that they are poor teaching instruments.

As far as this feature is concerned, Guthrie and Powers, in their new book, *Educational Psychology*, seem to have achieved an unusually happy balance. The book has a freshness of style and a succinctness of statement which appeal to college students because it does not have the effect of being a restatement of principles of general psychology. At the same time, the interdependence of educators and psychologists is strongly emphasized.

The authors teach at the University of Washington, where Guthrie is dean of the Graduate School and Powers is dean of the College of Education. The book is based on

a dual belief: "(1) that the heart of educational psychology is the psychology of learning and (2) that . . . the ultimate test of a theory of learning is its influence on the all-round growth of young people" (p. iii). The book contains thirty-one chapters distributed among eight parts. By far the longest part is "Learning and Its Measurement," which includes ten chapters. This is preceded by a section on "Foundations of Learning" and is followed by sections which deal with "Improving Learning Habits," "Social Adjustment through Learning Experiences," and "Personal Adjustment through Learning Experiences." Thus, the major part of the book is primarily about the psychology of learning. The remainder deals with the application of learning principles to school procedures.

Guthrie and Powers spend considerable time and effort on the question whether a learning can take place with one association of stimulus and response. They discuss at some length the roles of repetition and drill, reward and punishment as ingredients in learning. They think of themselves as rather unique in insisting that learning occurs with one association. It seems to this reviewer that some of this difficulty would have been resolved if they had distinguished between forms, or kinds, of learning earlier in their presentation. My experience has been that the psychology of learning can be taught much better if various forms of learning are identified early in the course. A classification such as Howard L. Kingsley made in *The Nature and Conditions of Learning* (Prentice-Hall, 1946) is extremely usable.

By the middle of their book, Guthrie and Powers are talking about motor skills, insights, memorization, problem-solving, attitudes, and so forth, and from there on this publication is extremely practical. It is this practicalness which is one of the book's best features. The chapters are short and, as mentioned above, the style is unusually good for a textbook. There is real humor throughout and a constant appeal to common sense.

Each chapter is followed by a usable list of questions which stimulate thought and discussion among college students.

This book should appeal to educators who do not want to get lost in the conflict between progressive and traditional education. As Buswell has pointed out, a school does not have to be child-centered or subject-centered; the test of real teaching con-

sists in the student's learning something. Guthrie and Powers say: "[An] attempt to develop serviceable attitudes, ideals, interests, and tastes by means of subject matter would be an improved approach in methods of education" (p. 146).

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- COLE, LAWRENCE E., and BRUCE, WILLIAM F. *Educational Psychology*. Yonkers-on-Hudson 5, New York: World Book Co., 1950. Pp. xvi+768. \$4.50.
- FARNSWORTH, PAUL RANDOLPH. *Musical Taste: Its Measurement and Cultural Nature*. Stanford University Publications, University Series, Education-Psychology, Vol. II, No. 1. Stanford University, California: Stanford University Press, 1950. Pp. 94. \$1.50.
- FISHER, CAROLINE E., and ROBERTSON, HAZEL GLAISTER, with Appendix by EDITH W. RAMSTAD. *Children and the Theater*. Stanford, California: Stanford University Press, 1950 (revised). Pp. xvi+236. \$4.00.
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